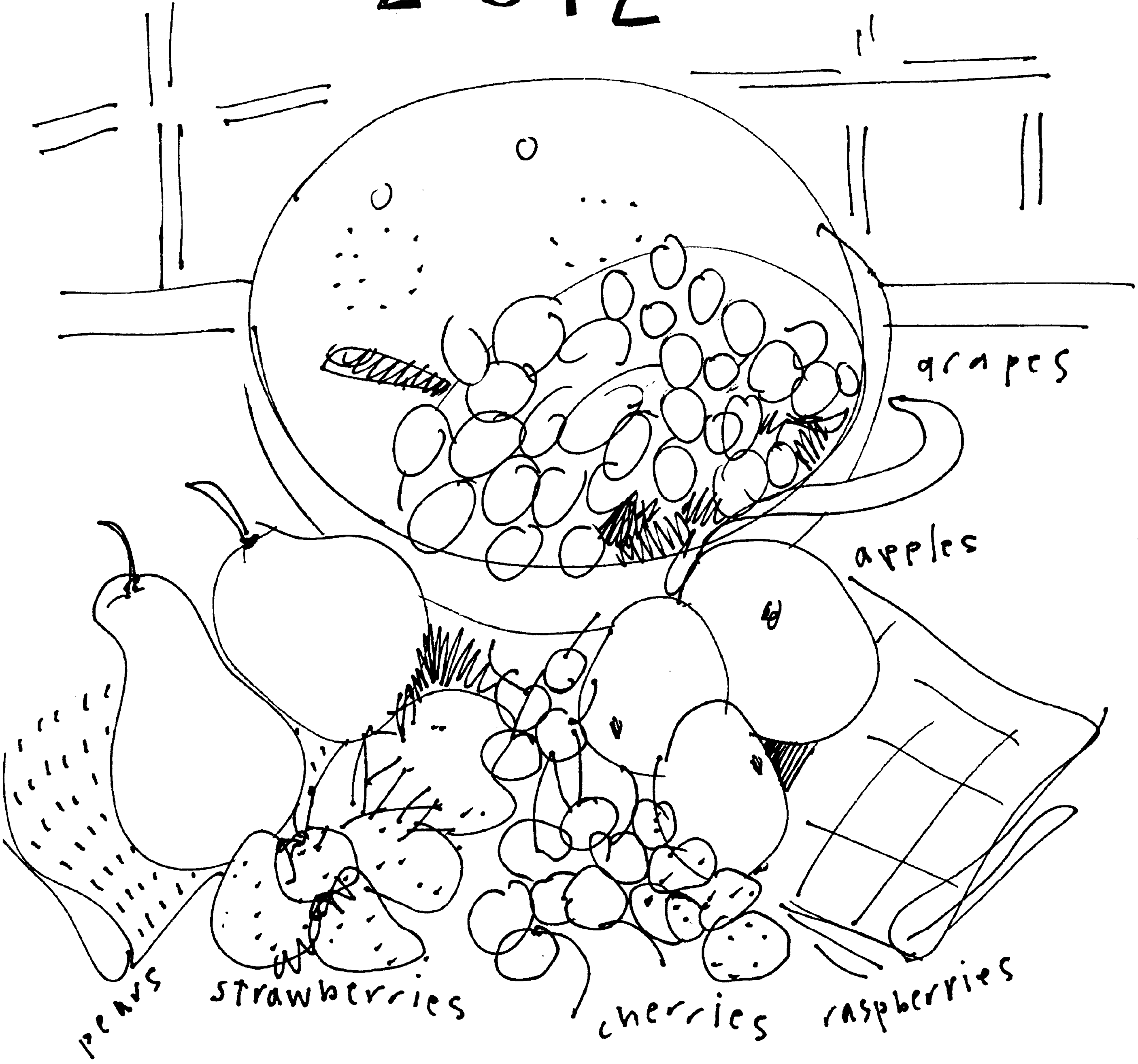
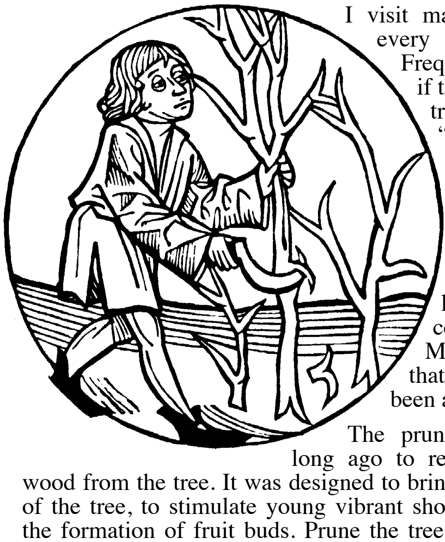
Fedco Trees 2012


grapes
apples
pears
strawberries
cherries
raspberries

FEDCO TREES 2012

Welcome to Fedco Trees' 28th annual order. Our goal is to provide the hardiest and healthiest plants available for cold climates, while supporting small-scale, local agriculture and a fair, cooperative and responsible workplace. Our no-frills operation and volume discounts help keep plants affordable. Consider ordering in a group with co-workers, friends or neighbors to further minimize your costs.

"…And their spears into pruning hooks."



I visit many dozens of old trees every year, mostly apples. Frequently the owners ask me if they should cut down their tree and plant a new one. "It doesn't fruit much anymore," they often say. "And all the fruit is way up high on the top of the tree where we can't get it." That the reddest fruit sometimes hangs in the least accessible spot is certainly true. But it is not Murphy's Law; rather it's that the pruning hook has *not* been at work.

The pruning hook was designed long ago to remove the old and dead wood from the tree. It was designed to bring light and air to all parts of the tree, to stimulate young vibrant shoot growth thus triggering the formation of fruit buds. Prune the tree and "new wood" grows, then fruit buds appear, then flowers and fruit.

The reason that big old neglected tree produces only a little fruit up on the top is pretty simple: that's the only place getting any sun. Consequently it's the only place getting any new growth, the only place getting any fruit buds and the only place getting any fruit. No pruning? No fruit. The pruning hook is designed to bring life. It is the life-giver.

The spear, as we all know, was designed for the opposite purpose. It is the life-taker, the life-destroyer. If the pruning hook brings light, the spear brings darkness. What might the world look like if the spears were all pounded into pruning hooks? What might my world look like if just one of my spears were pounded into a pruning hook? Is there a blacksmith in the house?

We reorganized the catalog this year. We've been noticing how plants love to interact and collaborate with people as well as with one another. We wanted the organization of the catalog to reflect that thinking. We've made some other changes. We added dwarf and semi-dwarf trees (see page 8), not because they are better than the good old standards, but because some people want them. They can play a valuable role. We added three "edible landscape" collections and a map of our Palermo yard. We hope this might inspire you as you tear out your lawn and compost the turf.

We planted a new 40-tree orchard on our farm a year ago and, with the help of our MOFGA apprentices, we are designing an integrated functional orchard system. Our goal is to minimize or eliminate all spraying—even organic. Look on pages 16–17 for diagrams and maps and everything. We have identified 80 companion plants which we will plant in the spring. Check our website for the list and for progress reports and more information. And we do still spray our orchard. This year we have published our spray schedule. You'll find it just inside the back cover.

We also bought a new warehouse! Actually it's an old warehouse but new to us. It's a mile from the old place and should give us enough space to run the business for years to come. We had run out of room. Seeds and Moose and OGS will stay on the Bellsqueeze Road. We'll be closer to the highway. The office will move from Waterville to join us there. We will lengthen the Tree Sale in the spring. We hope you'll come see us then.

To accompany the new warehouse and catalog structure we're trying some other improvements to our systems: a larger discount for larger orders, a later discount deadline for your convenience, and a "small & light" shipping option for those who desire only items that are less expensive to ship than our giant boxes.

We do special orders. If you wish to buy large quantities of any item, larger or smaller plants than we are listing, rooted cuttings, or unusual items we're not listing, please write with particulars.

All of our trees are unconditionally guaranteed. If your tree or shrub does not grow to your satisfaction during the first growing season, please let us know! We'll send a refund or you can order a replacement the following year. We don't have a huge staff or a fancy set of offices. If we don't respond quickly, don't hesitate to remind us; we are in business to serve you. Enjoy the catalog!

Please share your experiences growing plants with us. Many of our selections originated from your suggestions. If you know of something growing near you we should be offering, or if you are interested in growing for us, please write to us. We welcome your comments, suggestions, and ideas.

So now it's time to get out the old spear and start a-pounding. There's nothing more fun than picking a few plants and collaborating. Dig and plant and fertilize and pick. And of course, prune. Time to learn a little blacksmithing.

John Bunker & Susan Kiralis

Our website: **www.fedcoseeds.com**
then click on Fedco Trees.

- **You may order online.**
- **Check product availability online.**

We also post color photos of most of our trees, shrubs and perennials and a wide range of information.

Ordering instructions **p. 3**
Order Forms **center**
Complete index **p. 67**

contact us
questions@fedcoseeds.com
phone 207-873-7333

begin on page
Hardy Fruit Trees **8**
Small Fruits & Berries **26**
Vines, Roots & Stems **29**
Ground Covers & Shrubs **34**
Large Trees **45**
Small Trees **49**
Tender Bulbs & Perennials **52**
Medicinal Plants **62**

Cover by Linda Jurras

We guarantee the quality of our trees and plants, and warrant that all items we offer are fully satisfactory.
If you are dissatisfied for any reason, we will replace the item or refund the purchase price.

Please inspect your order upon receipt and use the correction sheet to notify us immediately of any problems. Because good results depend upon weather, soil and cultural practices over which we have no control, we limit our liability in all instances to the purchase price. The liability of Fedco Seeds, Inc., for breach of warranty, or any loss or damages arising out of the purchase or use of our products, including loss or damages resulting from any negligence whatsoever on our part, or strict liability in tort, shall be limited to the purchase price. By acceptance of the merchandise, the buyer acknowledges that the limitations and disclaimers herein described are conditions of sale, and that they constitute the entire agreement between the parties regarding any warranty or liability. Claims for any defects in Fedco's products should be presented to Fedco as soon as possible after discovery. Failure to assert claims within 30 days after discovery renders this warranty null and void.

Ordering Information —

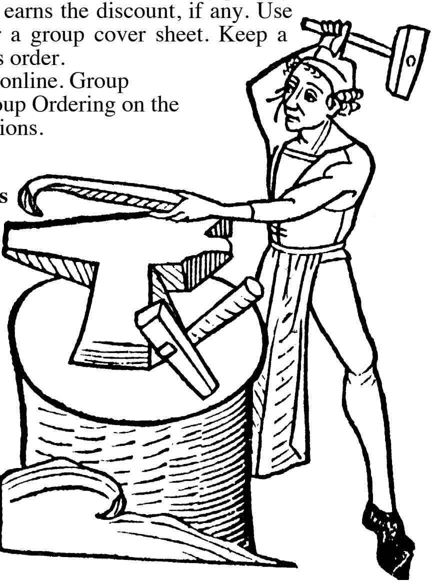
Order items from this catalog online or on a Trees 2012 **order form**, in the center of the catalog; you may submit as many pages as you need, either photocopies, forms downloaded from our website or printouts mimicking our format. To encourage you to participate in a group order and to order early, we give discounts.

Payment: we accept check, money order, Visa and MasterCard; payment must accompany all orders. We request that mailed orders under $25 pay by check or MO. Make your check out to Fedco. We will charge your card when we receive your order. We will bill or refund you for any adjustments as each order is completed.

- **Online**: go to **fedcoseeds.com** and click on Fedco Trees.
- **Mail** your order: **Fedco Trees, PO Box 520, Waterville, ME 04903-0520.** Keep a copy of your order for your records. To confirm receipt of your order, enclose a stamped self-addressed postcard.
- **We do not take fax or phone orders.**

Group orders: By mail, send us at one time all your members' order forms with one payment and receive the individually packaged orders at one address. The group total earns the discount, if any. Use an additional order form for a group cover sheet. Keep a copy of each group member's order.

We also take group orders online. Group coordinators can click on Group Ordering on the Fedco Trees page for instructions.



Maine 5% sales tax: for **Maine residents** and **pickups** only.

We charge **$10 for handling if you adjust your order**. Additions, deletions and cancellations are costly for us to process. You are welcome to place as many separate orders as you wish.

We will offer surplus for sale at the Tree Sale. Sometimes we have stock left over after the Tree Sale, but never after May 15th, when we shut down completely and go home to plant.

Our Planting Guide
is incorporated into the catalog. **Save your catalog** for planting and cultural instructions. The catalog is also available online. We will not send planting guides with orders unless you request them.

Our Variety Descriptions –

All trees and plants are bare-rooted (except where noted), and even a large order can fit into a station wagon. All fruit and nut trees are well-rooted, 1/4-7/8" in diameter.

Fruit trees are grafted onto the hardiest standard-sized rootstocks available, except for our new apple offerings on dwarfing (size controlling) rootstock. Standard trees are stronger rooted, hardier, and longer lived than dwarf or semi-dwarf trees. You can keep a tree on standard rootstock small by keeping it pruned.

For fruit trees and berries, the **exact dates of peak ripeness** will vary from place to place.

The **zone hardiness rating** will aid you in determining whether a plant will be hardy for you. The average minimum temperature in your area determines your zone. See the chart on p. 7. Apple descriptions have minimum *and* maximum zones because apples typically need cold climates to produce the best fruit. Your own soil conditions, microclimate and topography will be equally important in determining the best varieties for you.

Please note **pollination** requirements for fruits, nuts and berries. Some plants are self-pollinating, others require a second plant for pollination, and others require a plant of a second variety.

We strive to give you accurate information about all the plants we sell. If you notice inaccuracies, please let us know.

John Bunker writes the tree and shrub descriptions; Holly Rhea and Susan Kiralis write tender bulb and perennial descriptions.

Discounts & Deadlines —

Discount deadline is **Friday, January 20, 2012.** Sorry, no volume discounts on later orders. Discounts apply only to orders either picked up or shipped to one address.

over $200	10% discount
over $400	15% discount
over $1000	20% discount

We fill all orders on a first-come first-served basis.

Final order deadline is **March 9, 2012.**

Shipping —

We ship most orders **via UPS beginning in early April**, continuing for about 10 days, timed according to planting zone. Our last regular shipping date is around April 13. We will have a special late shipping date around May 2. We do not ship at other times.

We strive to make our **shipping charges** fair, and it is a challenge. This year we are trying a new scheme. Since most packages we send with trees and shrubs are subject to expensive charges for oversized boxes and heavy weights, we are starting a new category of small and light items that cost less to ship.

Regular UPS shipping charges: Shipping is a percentage of your adjusted total with the following minimums:

area	minimum	rate
New England	$16	10% over $160
NY, NJ and PA	18	10% over $180
all other states	22	12% over $190

Shipments to Alaska go via USPS Priority Mail:

Alaska	$22	20% over $110

Please include a postal address. This rate also applies to anyone in the lower 48 who *requires* postal delivery.

Small & Light shipping: If you order **only** items with stock numbers 7000–8800: perennials, bulbs, strawberries, rhubarb, hops, asparagus, horseradish, groundnut, t-shirts, books.

S&L to all states	$8	10% over $80

If you order **any** other items in addition to these, you **must** pay the regular shipping charges.

If you require a specific ship date during our regular shipping time, or late shipment around May 2, **we charge an additional $15** to cover our extra handling costs.

Pickup —

Pick up your order during our annual Tree Sale at our new warehouse in Clinton, Maine. Friday and Saturday, April 27–28, are reserved for preorder customers. The second Friday and Saturday, May 4–5, we are open to the public. **Sale hours are 9:00–3:00** each day. We will send you a pickup reminder and map in April.

Substitutions —

When dealing with live plants, we can never be certain that we can fill your order. Our default mode is to substitute a similar variety, if something becomes unavailable, as most people prefer a similar tree or plant to a refund. On the order form, if you indicate you don't want any substitutions, we'll send a refund.

If you order apples, please indicate whether you will accept the varieties on different rootstocks.

VARIETY NAME
SEASON OF RIPENESS
AG. STATION TEST NUMBER
PARENTAGE

Winfrey Apple Fall-Winter. MS1954 (Winter Gem x Redfree) Wisc, 1973. A chance cross first discovered in Milwaukee in 1973. Dark bronze-red skin with blush. Firm crisp flesh has a slightly tart burst with a sweet aftertaste. Keeps extremely well and achieved great popularity but was withdrawn in 2011. We'll miss this excellent apple. Z3-9. **ME Grown.**

YEAR OF INTRO-DUCTION

GROWN BY FEDCO GROWERS LOOP

12690 Winfrey $24.00

ZONE RANGE

BOTANICAL NAME
CULTIVAR NAME
COMMON NAME

Castanea perfida **'Boehner' Congressional Chestnut**
6x2' Recent release, promoted as a replacement for the American Chestnut, hyped as being immune to the foreign chestnut blight. Planted widely in Washington, the roots worked their way into the lobbies on K Street. After early success, proved to be as disease-prone as its predecessors. Z5. (2-yr well-heeled transplants)

MATURE HEIGHT x WIDTH

SIZE OF PLANT STOCK

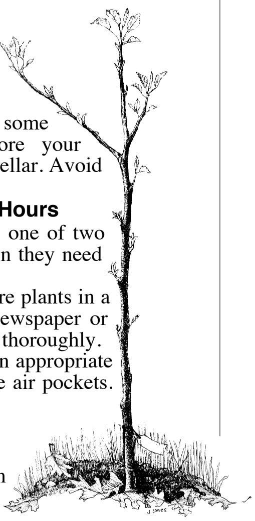
06120 Boehner Chestnut $24,444.00

ITEM NUMBER
PRICE
ZONE HARDINESS RATING

When you get your order: Immediate Care

When your new trees and plants arrive they are breaking dormancy and need to be planted as soon as possible. The longer they remain unplanted, the more stressed they become and the longer their recovery will take.

DO NOT ALLOW ROOTS TO DRY OUT AT ALL!!!



Trees & Shrubs: Planting Within 48 Hours

Leave the plastic wrapping around the root ball. Add some water to remoisten the packing material and store your trees/plants in a cool shaded place like a shed, barn or cellar. Avoid heat and sunlight.

Trees & Shrubs: If You Cannot Plant Within 48 Hours

You may keep plants for a week or two by following one of two temporary measures and continuing to water trees when they need it.

1) Remove the plastic wrap around the root ball. Store plants in a cool shaded place. Wrap the roots in wet shredded newspaper or sawdust, packing firmly to eliminate air pockets. Water thoroughly.

2) "Heel in" your plants. Dig a trench or turn back an appropriate amount of earth and bury roots; tamp firmly to remove air pockets. Water thoroughly.

Asparagus

Open up asparagus roots and store dry and uncovered in a cool shaded place.

Strawberries

Refrigerate strawberry plants until you are ready to plant them.

Perennials

Open bags and check the stock immediately. Roots and crowns should be firm and pliable, not squishy or brittle. If they are slightly dry, add a little water or, if they are going to be potted up soon, soak the roots. Generally, a little surface mold is harmless and will not affect the plant's future performance. If you cannot pot the crowns up immediately, store them in a cool (35–40°) location for a short time. See page 53 for details.

Sweating Nursery Stock

Some trees and shrubs become extremely dormant during refrigerated storage. These include: Amelanchier (juneberry), Betula (birch), Celtis (hackberry), Cercis (redbud), Crataegus (hawthorne), Morus (mulberry), Quercus (oak), and Potentilla (cinquefoil).

Sweating nursery stock ensures breaking of dormancy. The easiest way to force any tree to break bud is to pot it and set it in a greenhouse or polyhouse. After the tree begins to leaf out, transplant it outdoors. If you don't have a greenhouse, lay the trees in a shady place, 45–70°, such as a garage, basement, barn, greenhouse, or outdoors in the shade. Cover the whole plant with very damp packing material (hay, newspaper, etc.) followed by a sheet of plastic. Sweating will take several days; check the buds every day. The trees are ready to plant when the buds begin to swell.

Warm May weather will give the best results. Until then, heel your trees in, or store them with roots covered in a cool barn or garage.

TREE PLANTING AND CARE

Choosing a Site for Fruit Trees and Berries

The best sites for fruit crops have well-drained fertile soils, protection from wind, good air drainage, and full sun. A gentle slope and six to eight hours of full sun per day is ideal. Good air flow will moderate frosts and fungal disease. If possible, avoid "frost pockets."

Sunny south- or west-facing slopes are not advisable for less hardy varieties. These slopes tend to warm up before the danger of frost has passed. Trees may flower prematurely and then be damaged by frost, causing loss of fruit. South and west slopes may also have widely fluctuating early spring temperatures that can damage less hardy trees.

Soil pH for fruit trees should be between 5.5 and 8.0, towards the lower end for apples, the higher end for peaches, and in the middle for others. Fruit species have optimal space requirements. See chart below.

Do not plant trees where power lines will interfere with them.

Fall Preparation or Spring Initial Feeding for Fruit Trees

If you're interested in preparing locations for your trees this fall, or for feeding newly planted fruit trees, the following amendment recipe should address most sites in the eastern U.S., which tend to be acidic, and moderate to low in calcium and phosphorus. You can apply this mix as a mulch to your newly planted tree in the spring. To order any of these products, refer to the Organic Growers Supply section of our Seed catalog or website.

Deluxe Method

Without digging the hole, cover an area 4–6' in diameter with:

5 lbs gypsum or Hi-Cal lime
5 lbs colloidal phosphate (short-term calcium and phosphorus)
5 lbs azomite (long-term minerals and trace minerals)
5 lbs granite meal or greensand (for improved soil texture)
2–3 lbs menafee humates (aids mineral and rock-powder breakdown)

For building high levels of humus, also add:

2 lbs alfalfa meal
2 lbs bone char or bone meal
2 lbs kelp meal
2 lbs blood meal
100 lbs compost (1/8 yard)
BioDynamic preps (optional)

Cover with a 3–4" mulch of lawn clippings, leaves or "brush" chips, which will smother the sod, conserve moisture, prevent leaching, and provide a habitat for soil organisms to break down the recipe. In the spring, pull back the mulch and dig your tree hole, incorporating the mineral supplements and compost into the backfill.

Simpler Method

Forgo the soil amendments and simply pile 1–2 wheelbarrow loads of compost on each planting-hole site. If you live by the ocean, add a couple of wheelbarrows of seaweed. Then cover with mulch. In the spring, pull back the mulch and plant your fruit tree, incorporating the compost into the hole as you dig.

Feeding older fruit trees

Cover the surface of the ground out to the drip line with the same materials listed above. For larger trees (five years and older) increase the mineral amount to 10–15 pounds each. For ancient trees you can add up to 25 lbs of each mineral in a ring beneath the drip line. Mulch as described above.

Plant Spacing of Fruit Trees and Berries

	between plants	between rows
Apples, Semi-dwarf	15'	15'
Apples, Standard	25–30'	25–30'
Asparagus	1–2'	4'
Blackberries	3–4'	6–12'
Blueberries, highbush	3–6'	8–10'
Blueberries, lowbush	1'	1'
Filazel	4'	hedge
Grapes	8'	8–10'
Kiwis	10'	10'
Nut trees - orchard	35'	35'
Nut trees - forest	20'	20'
Pears, Asian Pears	20'	20'
Raspberries	2'	6–12'
Stone Fruit	15–20'	15–20'
Strawberries	see instructions, p. 28	
Sweet Cherries	25'	25'

The basics of tree care are outlined here and are designed to get you going. Obviously we can't tell you everything you need to know in a few pages. Additional information, such as location and soil preferences, about specific plants is in the item descriptions. Reading, observation, trial and error, and talking with other growers and extension agents can expand your knowledge of trees and shrubs. A soil test is useful in determining the specific needs of your site.

Consult the Fedco Seeds catalog, Organic Growers Supply section, book list for some recommended reference books, or look for information on the internet. There are many useful links at our website, www.fedcoseeds.com.

General Planting Directions for Trees and Shrubs

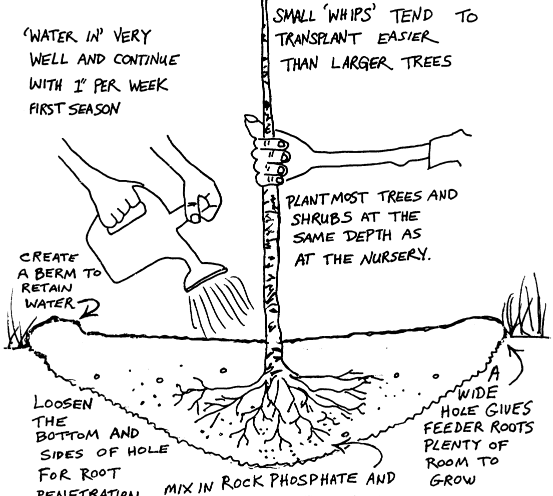
Dig a large hole, at least twice as wide and about as deep as the root system. Most roots grow laterally and need plenty of room to spread out. Your trees will benefit if the hole is at least 3' wide. Loosen up the soil at the bottom of the hole and especially around the sides. For fruit trees, if you haven't used a deluxe fall preparation, you may add a 3-pound bag of our planting mix (available from the Organic Growers Supply section of the Fedco Seeds catalog), or well-aged compost and mineral fertilizers such as rock phosphate, but not manure or other nitrogen sources. We add about a coffee-can of rock phosphate for each fruit tree. You may also add a handful of azomite at this time. Replace the topsoil around the roots where it will do the most good. If you situate non-fruit trees according to their requirements, there is no need to add any supplements to your soil. This is the best way to ensure that your plants will thrive for many years.

For best results plant on cool cloudy days in the early morning or late afternoon. Soak deciduous trees and shrubs for up to 24 hours before planting. Keep the roots from drying out. Even a few minutes in the sun and breeze can kill a tree or shrub. Keep them in a bucket of water as you plant.

Generally you should plant trees and shrubs at the same depth that they grew in the nursery. Plant semi-dwarf or dwarf fruit trees with the graft 2" above ground level. Spread the roots out as you set the trees in the holes. Make a mound at the bottom of the hole over which to spread the roots. Give your trees plenty of water to "puddle in" as you plant. Wiggle the trunk as the water seeps in to ensure that the roots are settled in with no air pockets. Leave a berm around each tree so water will seep in and not run off. Keep them well watered throughout the first summer. They require the equivalent of 1–2" rain per week. A good soaking is effective; sprinkling is not.

Initial Pruning

Prune dead or injured branches and roots on all trees and shrubs. Further pruning of most trees is not necessary at planting time. Do not prune tops or prune or bend tap roots of nut trees. Specific preplanting pruning requirements for small fruits and some ornamentals is noted in their respective sections and more general information on pruning begins on p. 38. Conifers (p. 45) and roses (pp. 42-43) require special pruning. See their sections for details.

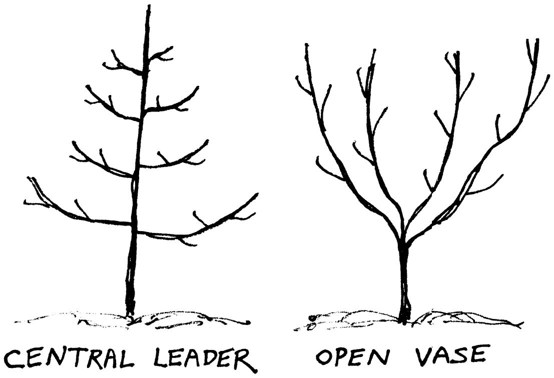

'WATER IN' VERY WELL AND CONTINUE WITH 1" PER WEEK FIRST SEASON
SMALL 'WHIPS' TEND TO TRANSPLANT EASIER THAN LARGER TREES
PLANT MOST TREES AND SHRUBS AT THE SAME DEPTH AS AT THE NURSERY.
CREATE A BERM TO RETAIN WATER
A WIDE HOLE GIVES FEEDER ROOTS PLENTY OF ROOM TO GROW
LOOSEN THE BOTTOM AND SIDES OF HOLE FOR ROOT PENETRATION
MIX IN ROCK PHOSPHATE AND AZOMITE, BUT NOT NITROGEN

Pruning Fruit Trees

Avoid pruning young trees except to establish a basic shape. Pruning young trees delays bearing. On apple and pear trees, leave the central leader alone and let it grow. It's ok to cut off extra trunks and large branches. Always remove suckers or root shoots from fruit trees. On peaches and plums, the trees may want to develop 2–4 leaders, or an open-vase shape. Always prune just above a good strong bud that faces a direction you'd like your plant to grow.

Pruning your young apple tree

Think seriously about establishing the long-term shape of your apple tree when it is young. How you shape your tree is largely a matter of personal preference. We grow only standard trees. We want the lowest scaffold (branch layer) to be very wide to collect as much sun as possible. If too low, these long branches will rest on the ground under the weight of fruit and deer will have a field day. Plus, it becomes difficult to mow, mulch, etc. We recommend training standard apple trees to have the first scaffold at about 4–6' high.



Once the tree begins to bear you will want to prune annually. Good pruning brings sunlight to all parts of your tree. Maximum sunlight encourages more and higher-quality fruit. Sunlight also encourages fruit buds to form for next year's crop. A well-pruned tree will produce larger fruit and will tend toward more annual bearing. Good pruning discourages fungal diseases and promotes greater spray penetration. There's an old saying that a bird should be able to fly through your fruit tree. Any good book on growing fruit trees will provide you the information you need. Pruning is not difficult to do and will make a huge difference.

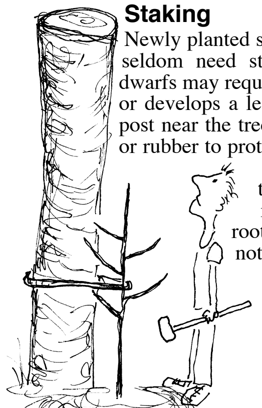
Most pruning should be done in late winter or early spring, although some say the best time to prune is when you have your clippers in your hand. We recommend a good-quality pair of hand shears and a lightweight pruning saw. You may also wish to invest in long-handled loppers, a pole pruner or a pole saw. Keep your pruning tools sharp for smooth, clean cuts.

Consult old and new books as well as orcharding articles and develop a system that works for you.

Weeping crabapples require special pruning. See p. 51 for instuctions.

Mulch

Keep weeds and especially grass away from new trees and shrubs. Apply a 2–4" mulch of composted material, leaves, wood chips or hay out as far as the drip line. A $^{1}/_{2}$–1" topdressing of alfalfa meal beneath the mulch may substantially reduce transplant shock. Keep mulch back several inches from the tree trunks. We lay down cardboard or newspaper and spread mulch on top of it. Mulch encourages earthworms, holds moisture, keeps down weeds, insulates against excess heat and cold, aerates and loosens soils, builds humus and fertilizes feeder roots, 90% of which are within 6" of the surface.

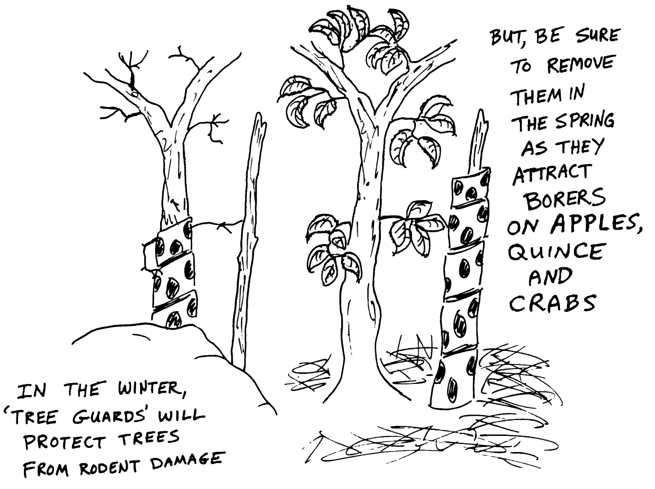


Staking

Newly planted standard-sized fruit trees and ornamental trees seldom need staking. Dwarf trees require staking. Semi-dwarfs may require staking. If your tree is in a very windy site or develops a leaning habit, staking may help. Drive a stout post near the tree. Wrap the tree trunk with a scrap of burlap or rubber to protect against abrasion. Secure the wrapped part of the tree to the post with string or wire. Tie tree somewhat loosely, as a slight rocking motion will encourage rooting. Once roots are well anchored, the stake may not be needed. Mark small trees with a stake with ribbons to warn operators of lawn mowers, tractors, cars, skidders and Bradley armored vehicles.

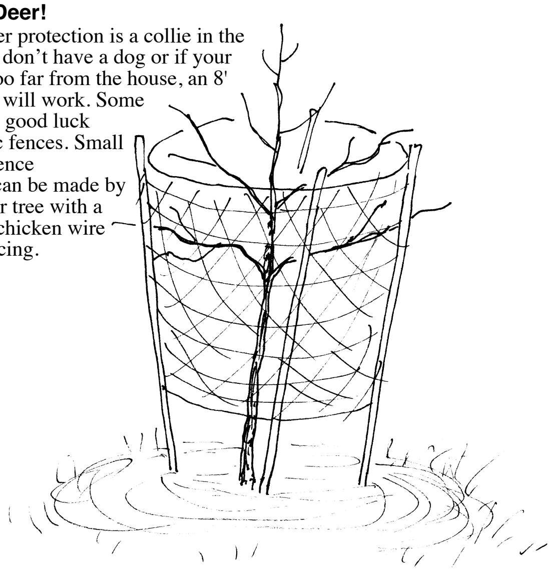
Mouse/Vole Protection

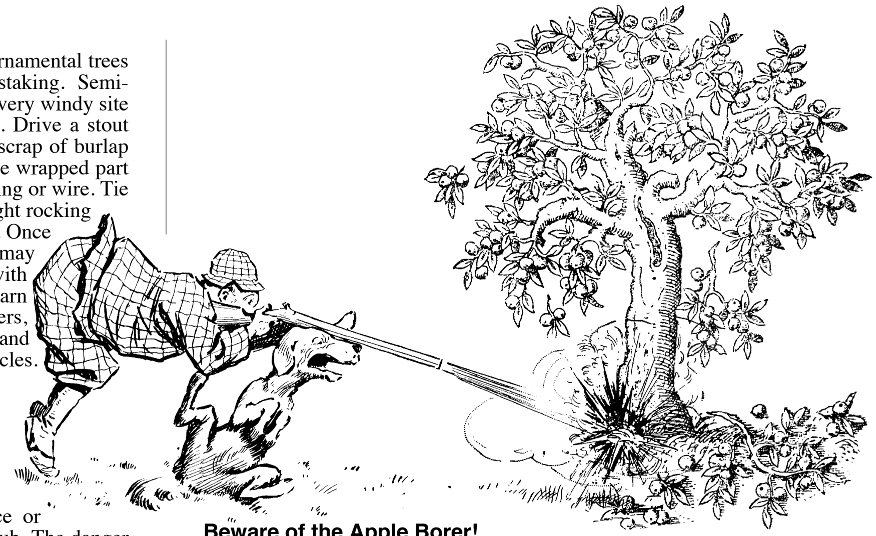
Fruit trees and ornamentals are sometimes girdled by mice or voles eating the bark. Girdling will usually kill the tree or shrub. The danger is greatest in winter. Keep the grass mowed in the fall and remove large mulch piles from near the trunks. Rodents like to nest in hay more than in chip mulches. A wrap of window screening or a plastic spiral tree guard will protect your tree from being girdled. If you use screening or plastic spiral tree guards on apple, quince or crabapple trees, remove them from April to October, as they attract borers if left on the tree in the summer. You can leave plastic spiral tree guards on most other trees year round.


BUT, BE SURE TO REMOVE THEM IN THE SPRING AS THEY ATTRACT BORERS ON APPLES, QUINCE AND CRABS
IN THE WINTER, 'TREE GUARDS' WILL PROTECT TREES FROM RODENT DAMAGE

Oh Dear, Deer!

The best deer protection is a collie in the yard. If you don't have a dog or if your orchard is too far from the house, an 8' sheep fence will work. Some people have good luck with electric fences. Small protective fence enclosures can be made by circling your tree with a cylinder of chicken wire or other fencing.





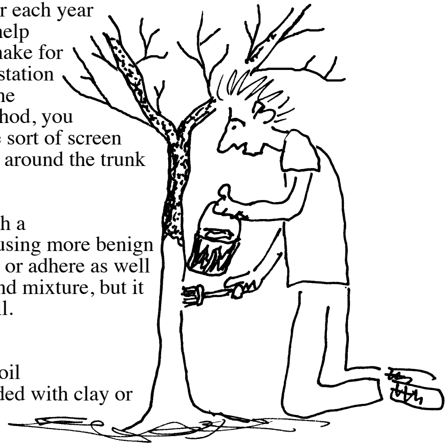
Beware of the Apple Borer!

In many parts of central and northern New England the roundheaded apple-tree borer (*Saperda candida*) is **the number one enemy** of young **apple**, **crabapple** and **quince** trees. If you are growing young apple trees in these locations, you must protect your trees from this pest. Farther south and north the borer *may* not be a pest. If you don't know if they are a problem in your area, check with any grower near you: they'll know. Otherwise, err on the side of caution. The borer does not endanger other fruit trees or ornamentals.

The borer beetle lays its eggs under the bark near the base of the tree. The developing larvae tunnel through the wood, eventually weakening the tree until it crumbles and falls over. The trouble sign is small deposits of orange sawdust, called frass, at the base of the tree, usually appearing in June or July. Left unchecked, borers usually mean death for your trees.

Borers thrive in shady moist warm environments. Keep grass back at least 6" from the tree base. Activity is most prevalent in June and July. Keep a lookout for the frass. Locate the hole or soft spot in the trunk and insert a wire until you locate and kill the larvae. Cut away soft, spongy pockets with a knife. Even serious carving is less harmful to the tree than leaving the larvae alive inside.

After years of experimentation, I think that **painting is the best deterrent**. I've tried a number of recipes and this is my favorite. It's easy and requires no hard-to-find ingredients. Mix white *interior* latex paint with joint compound. (The stuff you smear on sheet rock joints and nail holes—you can buy a small tub at any hardware store. Some exterior paint formulations contain ingredients that can harm the underlying phloem.) The consistency should be thick but still quite easy to paint, not glob on. Repaint periodically or each year as needed. This mix will help deter borers. It will also make for easy detection of any infestation you may have. Look for the frass! Using the paint method, you will also need to put some sort of screen or plastic rodent protector around the trunk during the winter months.

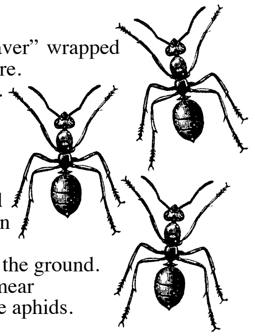


We are experimenting with a borer-protection formula using more benign ingredients. It doesn't last or adhere as well as the paint-joint compound mixture, but it appears to work fairly well.

2 qt quick lime
4 gal milk
1 gal boiled linseed oil

Mix well. Thicken as needed with clay or Surround (available in the Organic Growers Supply section of the Fedco Seeds catalog). Apply with a paint brush. Reapply as needed.

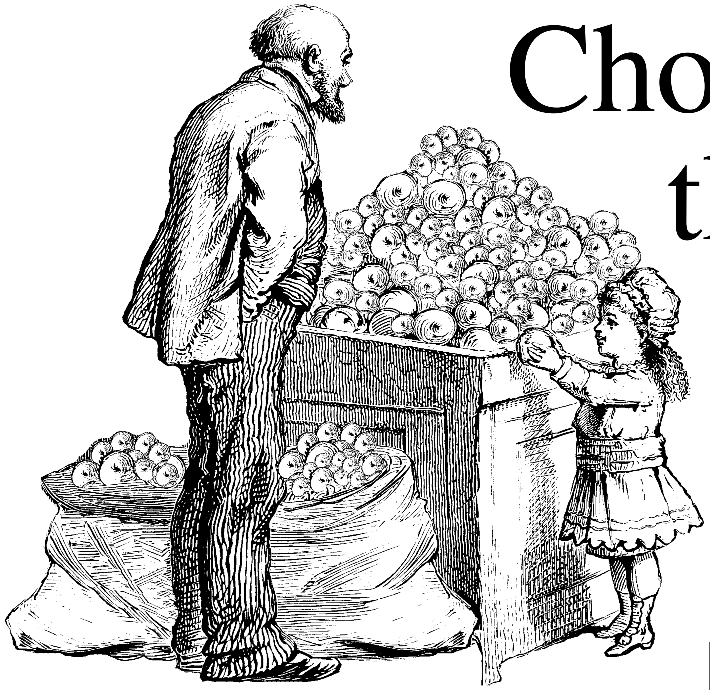
For many years I used a homemade "screen saver" wrapped around the young trees to deter borers. No more. I've given up and switched to the paint method. I recommend you do too.



Aphids and ants

Aphids can do a lot of damage to apple trees and they make the young leaves look gross. Here's an easy solution. Wrap a piece of stiff paper about 6" wide around the trunk about a foot or two off the ground. Tape this "sleeve" to itself but not to the tree. Smear Tanglefoot on the paper. In a day or two no more aphids.

Choosing the right apple!



USDA Hardiness Zone	Average Minimum Temperature
2	-50° to -40°
3	-40° to -30°
4	-30° to -20°
5	-20° to -10°
6	-10° to 0°

Scionwood

Request the order form with a SASE, or download it from our website.

No online ordering for scionwood.

Order deadline is Feb 24, 2012, for shipment around March 22. See p. 19 for more information.

Item	Name	Zones	Suitable for Coldest Spots	Season	Uses	Best apples for All–Around	Fall Eating	Storage	Cooking	Pies	High Flavor	Cider
10074	Ashmead's Kernel	4-7		winter	dessert			🍎			🍎	🍎
10120	Baldwin	4-6		winter	all purpose	🍎		🍎	🍎	🍎		🍎
10171	Belle de Boskoop	4-6		winter	cooking				🍎	🍎		
10183	Benton Red	4-6		winter	all purpose	🍎		🍎	🍎			🍎
10204	Black Oxford	4-5		winter	all purpose	🍎		🍎	🍎	🍎		🍎
20354	Burgundy	3-5	🍎	fall	all purpose		🍎		🍎			
10363	Calville Blanc	4-7		fall	all purpose	🍎	🍎		🍎	🍎	🍎	🍎
10390	Canadian Strawberry	4-5		fall	all purpose	🍎	🍎			🍎	🍎	🍎
10438	Chestnut	3-5	🍎	fall	all purpose	🍎	🍎				🍎	
10498	Cortland	4-5		fall	all purpose	🍎		🍎	🍎		🍎	
10504	Cox's Orange Pippin	4-6		fall	dessert		🍎				🍎	🍎
10633	Duchess of Oldenburg	3-4	🍎	summer	all purpose	🍎			🍎	🍎		
10636	Dudley Winter	3-4	🍎	fall	all purpose	🍎	🍎		🍎	🍎		
10714	Esopus Spitzenburg	4-7		winter	all purpose	🍎		🍎			🍎	🍎
10768	Fameuse	3-5		fall	all purpose	🍎			🍎		🍎	🍎
20816	Freedom	4-7		fall	all purpose	🍎	🍎		🍎			
10834	Frostbite (MN 447)	4-6		fall	dessert		🍎	🍎			🍎	
30933	Golden Russet	4-6		winter	all purpose	🍎		🍎			🍎	🍎
20947	Gold Rush	5-8		winter	dessert			🍎			🍎	
10951	Goodland	3-4	🍎	fall	all purpose	🍎	🍎		🍎			
10996	Grimes Golden	4-6		winter	all purpose	🍎	🍎	🍎	🍎		🍎	🍎
11014	Haralson	3-5	🍎	winter	all purpose	🍎		🍎	🍎	🍎		
11113	Honeycrisp	3-4	🍎	winter	dessert		🍎	🍎			🍎	🍎
11354	Kavanagh	4-6		fall	all purpose	🍎		🍎		🍎		
11484	Liberty	4-6		fall	all purpose	🍎	🍎				🍎	
61537	Macoun	4-6		fall	all purpose	🍎	🍎					
11569	McIntosh	4-5		fall	all purpose	🍎	🍎		🍎			
11614	Milo Gibson	4-7		fall	dessert						🍎	
11762	Northern Spy	4-6		winter	all purpose	🍎		🍎	🍎	🍎	🍎	🍎
11954	Pomme Grise	3-5		winter	dessert		🍎				🍎	
22058	Red Gravenstein	4-8		summer	all purpose	🍎	🍎		🍎	🍎		
12112	Rhode Island Greening	4-6		fall	cooking	🍎			🍎	🍎		🍎
12138	Roxbury Russet	4-6		winter	all purpose	🍎			🍎	🍎		
12292	Somerset of Maine	4-5		fall	all purpose		🍎				🍎	
12340	Starkey	4-5		fall	dessert		🍎				🍎	
12288	State Fair	3-5	🍎	summer	all purpose	🍎			🍎			
12466	Sweet Sixteen	3-6	🍎	fall	dessert		🍎	🍎			🍎	🍎
12616	Wealthy	3-4	🍎	fall	all purpose	🍎	🍎		🍎	🍎		🍎
12667	Williams Pride	4-7		summer	dessert						🍎	
12680	Winekist	4-6		summer	all purpose	🍎						
12727	Wolf River	3-5	🍎	fall	cooking				🍎			
12777	Yellow Transparent	3-5	🍎	summer	cooking				🍎			
12796	Zestar	3-5	🍎	summer	dessert						🍎	

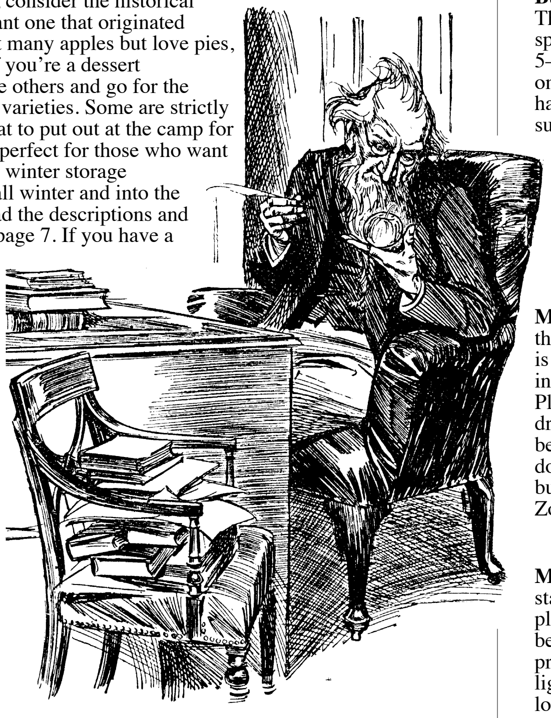
Apples

Malus spp. Some definitions: **Summer apples** ripen in summer, are generally crisp only for a short period, do not store well, and are often best for cooking. **Fall apples** store longer and are useful for a wide variety of purposes. **Winter apples** ripen mid to late fall, store well, and reach their best flavor after weeks, or even months, of storage. **Dessert apples** are delicious eaten raw. **Subacid** means tart! **Russet** or **russeting** is a skin texture (fairly common on apple varieties and characteristic of a few pears and potatoes) which looks and feels somewhat like suede. **Bloom** is a naturally occurring dust-like film on the skin of some varieties of apples, plums and grapes.

Each variety has a **climate range** where it will thrive and produce its best fruit. At the end of each apple description we list a range of zones. For example, Z3-4 signifies that this apple will reach perfection in Zones 3 and 4 and that we don't recommend it farther south even though it would be plenty hardy. Z4-6 means that this apple will reach perfection in Zones 4, 5 or 6. Although, last year we received reports from over 3100 miles away in southern California that some of our rarest Maine apples are thriving in Zone 10A. Still, we suggest that you use this guide to select apples most appropriate to your area.

Choosing a variety: not every variety is right for you. It's not just about what tastes good. They all taste good to someone. It's a case of "different strokes for different folks." **All-purpose** apples are just that. They are good for a bunch of jobs. If I were planting just one tree, I'd start there. However if you're a history buff, consider the historical varieties and maybe plant one that originated nearby. If you don't eat many apples but love pies, go for the pie apples. If you're a dessert connoisseur, skip all the others and go for the highly flavored dessert varieties. Some are strictly for cider. Some are great to put out at the camp for summer use. Some are perfect for those who want fall fruit but don't have winter storage facilities. Others keep all winter and into the following summer. Read the descriptions and check out the chart on page 7. If you have a question about a specific variety, drop me an email. I'll try to help!

This year we will once again offer most of our apples on standard Antonovka seedling rootstock. We also offer several varieties on dwarf and semi-dwarf rootstocks. The next column has more information about these "size-controlling" rootstocks and a list of available dwarfs and semi-dwarfs. Variety descriptions follow, beginning on the next page.



Some people wonder why we have almost exclusively offered our trees on standard (full-sized) rootstock over the years. Standard trees have deep, substantial—and therefore hardier—root systems. By selecting the varieties appropriate to your district, grafted on standard rootstock, you may well be planting a tree that will be picked by your grandchildren's grandchildren. Standard trees will grow to be large, but you can keep them trimmed. Our largest trees are now about 25 years old. The tallest are still well under twenty feet.

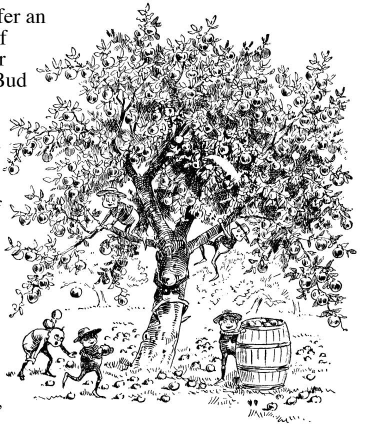
Although standard-sized apple trees may be planted as close as 10–15' apart, they were typically planted 30' apart in 19th-century orchards. We generally plant standard trees 20–25' apart with good results.

Apple trees are adaptable to a variety of soils and climates, though they prefer well-drained fertile soil. See pages 4–5 for information on soil preparation and planting. Varieties bearing annually are noted; others normally bear every other year. With diligent annual pruning and thinning, most apples will produce an annual crop, one heavy, the next light.

All apple trees require a second variety for pollination, but any apple or crabapple within a quarter mile will probably do. (We provide 3½ to 6' trees.)

Dwarf and Semi-dwarf Apples

This year we are very pleased to offer an assortment of dwarf and semi-dwarf apples. We're offering them on four rootstocks: Bud 9, M7, M111 and Bud 118. Each of the four has great advantages for some growers, but beware! These rootstocks also have their limitations. They are not for everyone. Please read on and decide if they are what you want. If you are uncertain, stick with the good old standards. Trees on Antonovka (standard rootstock) are extremely rugged, more tolerant of drought and poor soils, very long-lived and more capable of thriving under a regime of benign neglect. For more detailed information on Bud 9 and Bud 118, see page 19.



Bud 9 dwarf rootstock produces a tree that is very small. It is a true dwarf. This makes it extremely easy to spray, prune and pick. It requires way less space in your yard and will fruit at a very early age. You can plant trees 5–10' apart. On the other hand, it will not live nearly as long as those grafted onto Antonovka. It will be less well-rooted, more susceptible to drought and have more difficulty accessing soil nutrients. Trees should be staked for support. Hardy, but not nearly as hardy as Antonovka.

60438 Chestnut on Bud 9 dwarf stock, $26.00
60996 Grimes Golden on Bud 9 dwarf stock, $26.00
61113 Honeycrisp on Bud 9 dwarf stock, $26.00
61484 Liberty on Bud 9 dwarf stock, $26.00
61537 Macoun on Bud 9 dwarf stock, $26.00
61762 Northern Spy on Bud 9 dwarf stock, $26.00

M7 semi-dwarf rootstock produces a tree that is slightly smaller than half the size of a standard. It is a true semi-dwarf. Some would call it a dwarf. It is very productive, easy to spray, prune and pick. It requires way less space in your yard and will fruit at a early age. Adapted to a wide range of soils. Plant trees about 15' apart. Uses water efficiently but may be susceptible to drought. Will not live nearly as long as those grafted onto Antonovka. It will be less well-rooted, and have more difficulty accessing soil nutrients. Trees do not need to be staked for support. Not as hardy as many other rootstocks but often used in New England commercial orchards. Hardy in much of Zone 5.

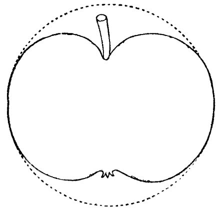
41762 Northern Spy on M7 semi-dwarf stock, $26.00

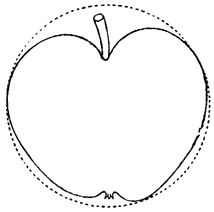
M111 semi-dwarfing rootstock produces a tree that is **about 85%** of standard size. Sometimes M111 trees are called "semi-standards". You can plant them closer together than standards, about 15–25' apart. M111 may not be more precocious than trees on standard. However it will likely be more productive. It has a relatively shallow spreading root system, does well in light soils, and is relatively drought tolerant. It is less well-rooted, not as long-lived and not as cold hardy as varieties grafted onto Antonovka.

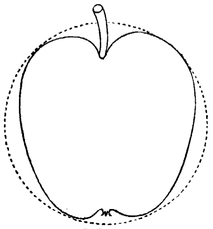
30074 Ashmead's Kernel on M111 semi-dwarf stock, $26.00
30363 Calville Blanc on M111 semi-dwarf stock, $26.00
30714 Esps Spitzenburg on M111 semi-dwarf stock, $26.00
30933 Golden Russet on M111 semi-dwarf stock, $26.00
31014 Haralson on M111 semi-dwarf stock, $26.00
31484 Liberty on M111 semi-dwarf stock, $26.00
32796 Zestar on M111 semi-dwarf stock, $26.00

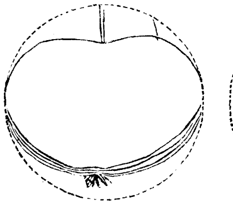
Bud 118 semi-dwarfing rootstock produces a tree that is **about 85%** of standard size or even larger. Sometimes Bud 118 trees are called "semi-standards" or even standards. Plant about 20–25' apart. Not considered to be more precocious than standards, but probably more productive. Very hardy, though not as hardy as Antonovka.

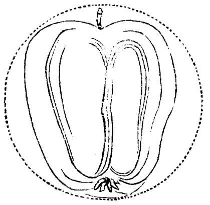
20816 Freedom on Bud 118 semi-dwarf stock, $24.00
20947 GoldRush on Bud 118 semi-dwarf stock, $24.00
21113 Honeycrisp on Bud 118 semi-dwarf stock, $26.00
22058 Red Gravenstein on B118 semi-dwarf stock, $24.00

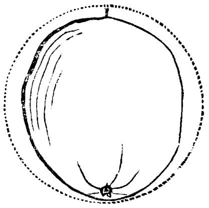

Oblate


Conical


Oblong


Oblate-conical

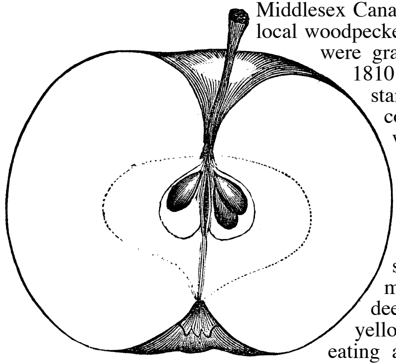

Ribbed


Ovate

Ashmead's Kernel Winter. Unknown parentage. Gloucester, England, about 1700. Possibly a seedling of Nonpareil. An after-dinner apple of unparalleled quality. Not for those who like mild sweet apples. Each bite is an intense aromatic sting of sharp and sweet, with hints of other indescribable but absolutely wonderful tastes and aftertastes. This apple could be served as dessert at the fanciest gathering of your most discerning friends. Beginning to show up here and there in commercial orchards. Makes a top-quality hard cider, blended or alone. Medium-small oblate and lopsided orange-gold-green russet fruits. Ripens in October. Store until New Year's to reach perfection. Keeps until they're all gone. Moderately vigorous tree may bear irregularly, but it's worth the wait. Somewhat scab resistant. Blooms midseason. Z4-7.

10074 Ashmead's Kernel, $24.00 **ME Grown**

30074 Ashmead's Kernel on M111 semi-dwarf stock, $26.00



Baldwin Winter. Wilmington, MA, about 1740. Also called **Butters Apple** or **Woodpecker**. Discovered on the Butters Farm by a surveyor planning the Middlesex Canal and noted as a favorite site for local woodpeckers. Scions from the original tree were grafted and growing in Maine by 1810, and by 1850 Baldwin was the standard all-purpose home and commercial variety wherever it was grown. It remained dominant in Maine until the terrible winter of 1934 when tens of thousands of trees perished and McIntosh became king. Large round-conic thick-skinned fruit. Light yellow skin almost entirely blushed, mottled and striped with red and deep carmine. Hard crisp juicy yellowish flesh makes excellent eating and keeps till spring. Vigorous adaptable hugely productive long-lived healthy tree. When grower Dave Gott asked the late renowned entomologist Ron Prokopy his opinion of Baldwin, Ron replied that the apple is "not practical commercially due to biennialism but the *only* apple that is both disease and insect resistant." Massachusetts' most famous apple where it grows to perfection. Also extremely nice here in central Maine. Hardiest in well-drained upland and north slopes. Blooms early to midseason. Z4-6. **ME Grown**.

10120 Baldwin, $24.00

Belle de Boskoop Winter. Probably a chance seedling from Holland, 1860. May also be a synonym or mutation of Montfort. Long the farm apple of Europe, every backyard had a Boskoop. Big blocky somewhat lumpy green fruit largely patched and netted with russet, sometimes has a brownish reddish blush. Every chef in Europe knows Boskoop—it cooks beautifully. Quickly reduces to a nice sauce: yellow, soft and medium tart. Grower David Maxwell of Nova Scotia calls it "an absolutely outstanding apple…seemingly resistant to everything. I didn't spray them at all and they are absolutely clean. The taste is equally outstanding." Quite tart right off the tree. However, after storage, the acidity softens and it becomes a very good table apple. Keeps well. Robust, strong-growing tree. Blooms early. Triploid, not a pollinator for other varieties. Z4-6. **ME Grown**.

10171 Belle de Boskoop, $24.00

Benton Red Winter. Delaware County, PA, before 1800. Also called **Pennock**. Very tart all-purpose winter apple. Good for everything: eating, cooking, drying, cider and storage. Medium-large fruit, round-conic with very smooth skin, mostly pink with red streaks. I first chanced upon a dozen of the trees about 30 years ago in an old farm orchard behind the Fitzpatrick Dairy buildings in Benton overlooking the Kennebec River. For the longest time I referred to it as "Fitzpatrick" or simply "Benton Red." I never saw the apple anywhere else. One friend identified it as Stark, but that proved to be incorrect. Recently I was able to piece the puzzle together: it appears to be the old Delaware County, PA, apple Pennock. Pennock was grown in central Maine as none other than "Benton Red"! Quite vigorous, reliably and annually productive, large upright-spreading vase-shaped tree. No scab but subject to bitter pit ("Baldwin Spot") controllable by calcium spray or soil amendment. Blooms midseason. Z4-6. **ME Grown**.

10183 Benton Red, $24.00

ME Grown = grown in Maine by a member of the Fedco growers coop.

Black Oxford Winter. Unknown parentage. Paris, Oxford County, ME, about 1790. This outstanding apple, a favorite long ago around much of Maine, has been making a huge comeback in the last 20 years. Our best seller until Honeycrisp came along. Medium-sized round fruit, deep purple with a blackish bloom. From a distance you might think you'd discovered a huge plum tree. A 200-year-old Black Oxford tree still grows in Hallowell, and still bears large crops. Excellent pies, superb late cider. Leave the skins on for a delightful pink sauce. Best eating late December to March. They seem to get sweeter and sweeter as the months go by. Good cooking until early summer. Some insect and disease resistance. Unusual light pink blooms, early midseason. Z4-5. **ME Grown**.

10204 Black Oxford, $24.00

Burgundy Fall. NY 161 [Monroe x NY 18491 (Macoun x Antonovka)] NY Station, 1974. An all-purpose apple, not well-known, but has an enthusiastic following among collectors. Glowing reports convinced us to put it on trial in Palermo a couple of years ago. Northern Aroostook County fruit growers Steve and Barb Miller were the first to introduce it to us. It's Barb's favorite cooking apple. According to Steve, "It reaches out and grabs you!" Striking for its large 3" size and glossy purplish-red roundish fruit. Waves and rays of red in firm juicy flesh. Strong distinctive aroma and a pleasantly unique flavor with a tart zingy aftertaste that awakens your tastebuds. One taster commented, "Wow, hey, that's really different!" Makes an aromatic well-balanced early cider and very good sauce. Bears annually, and hangs on the tree for extended picking. Stores about two months. Blooms late. Z3-5. **ME Grown**.

20354 Burgundy, $24.00

Calville Blanc d'Hiver Winter. Unknown parentage. France or Germany, 16th century. Also called **White Winter Calville**. Famous as a dessert and cooking apple for over 400 years. Steve Wood of Poverty Lane orchards in Lebanon, NH, called it "the best culinary apple in the world." Large flattish pale green-yellow fruit with uneven lumpy ribs and a dotted orange-red blush. Creamy-white aromatic fine-grained juicy flesh with a sweet distinctive effervescent flavor. Smooth when baked. Recommended for vinegar, fresh cider and as a sharp (acid) component in fermented cider. Should be stored a month to reach peak flavor. Will keep until midwinter. Very vigorous strongly upright vase-shaped tree with good branch angles. Head the tree if necessary to force it down. Not for coldest areas though certainly hardy to Zone 4. Blooms midseason. Z4-7.

10363 Calville Blanc, $24.00 **ME Grown**

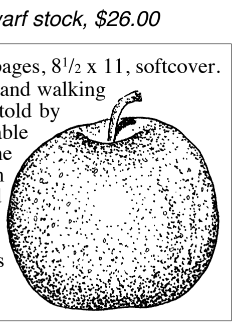
30363 Calville Blanc on M111 semi-dwarf stock, $26.00

Not Far from the Tree: A Brief History of the Apples and the Orchards of Palermo, Maine, 1804-2004 by John Bunker, 200 pages, 8½ x 11, softcover. John reveals how he came to know so much about apples—he spent years talking to his neighbors in Palermo listening to their stories and walking their fields and orchards learning the varieties, how they came to be planted there and why. A wonderful lesson in Maine history as told by apples. His engaging narrative and entertaining and informative drawings take us into the rich diverse past of a seemingly unremarkable town. A history of agriculture told in the apple trees. Many long abandoned and all but forgotten, some nursed back to health, and some finding new life as scionwood that begets generations of apple trees from Fedco. John is a colleague and a friend and I confess that I am not a disinterested reviewer. I even have a tiny part in his story—I taught him how to make an apple pie. John's love of apples and affection for his neighbors and town speak clearly through each page. Copiously illustrated in John's unmistakable style.

–David Shipman

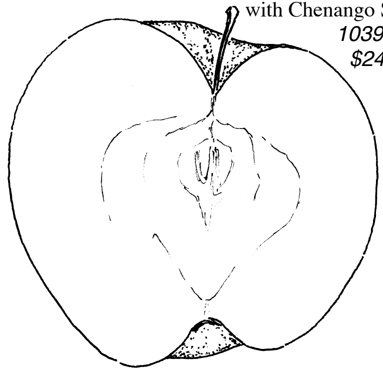
We will donate $5 from the sale of each book to the Palermo Historical Society. Also available year-round from Organic Growers Supply.

7509 Not Far from the Tree, $22.00



Canadian Strawberry Fall. Unknown parentage. Solon, ME. Beautiful superb-tasting dessert apple. Very good early season cider. Perfectly ripe at the end of September in central Maine where, in a good year, you won't find a better apple. In 2002 we put Canadian Strawberry up against Cox's Orange Pippin and Chestnut crab at a Common Ground Fair taste test and it beat both of them. Surprisingly juicy distinctly tart full-flavored medium-to-large round-conic fruit. Rich buttery-yellow skin overspread with a veil of vibrant red-orange. In 1996 Roy Slamm convinced me to visit and subsequently propagate nursery stock from the three ancient "Strawberry" trees on his South Solon farm, thus saving the apple from almost certain extinction. Sadly, Roy passed away last winter. A creative, talented, generous and cheerful soul, he will be greatly missed. Medium-sized upright tree bears annually. Fruit does not keep well. Blooms midseason. Not to be confused with Chenango Strawberry. Z4-5. **ME Grown**.

10390 Canadian Strawberry, $24.00



Canadian Strawberry
"Sweetest apple you'll
ever taste"
he says,
Roy Slamm
in a dream now
smiling—
sweet, sweet—

Gary Lawless

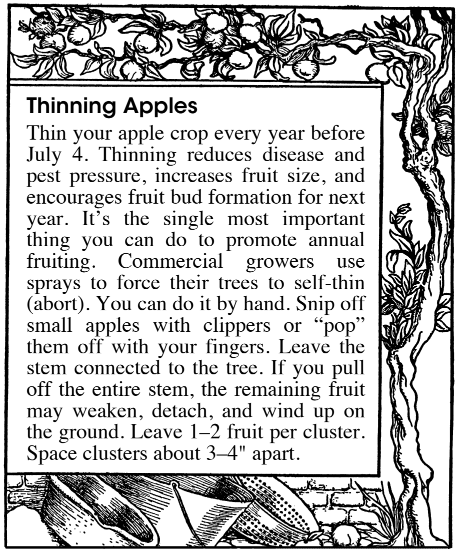
Chestnut Early Fall. MN 240 (Malinda x open-pollinated) U Minn, 1946. A lot of people love this apple. Small golf-ball-sized fruit with truly excellent fresh eating qualities. Yellow and bronze-red skin with some russeting. Firm crisp juicy fine-grained very sweet yellowish flesh. The apple version of Sun Gold tomato—fabulous complex flavor in a small package. For a growing number of people in central Maine, late September is Chestnut apple time. Every year we put out a bushel a day at Fedco's booth at the Common Ground Fair and watch them disappear. Neophytes often look at the fruit with disdain. Most however take one bite and their frowns turn to smiles. (For some, despite its crispness and depth of flavor, it is *too* sweet.) Chestnut needs no sugar to make a sweet and subtle sauce. Not a keeper, but can be stored for a month or so. Vigorous, somewhat weeping, medium-sized productive tree. Disease resistant. Also beautiful in bloom, midseason. Z3-5.

10438 Chestnut, $24.00 **ME Grown**

60438 Chestnut on Bud 9 dwarf stock, $26.00

Cortland Fall-Winter. (Ben Davis x McIntosh) NY Stn, 1915. A cross between two commercial giants at the time, one (Ben Davis) on the way out and the other (McIntosh #**11569**) on the way in. Although never as important as McIntosh, Cortland remains a very popular apple throughout northern New England even in this era of many new introductions. Medium to medium-large slightly ribbed dull red fruit with a purple blush. Excellent eating and cooking. Slow-oxidizing white flesh is very good in salads; fine-grained, crisp, tender, juicy. Produces a surprisingly delightful cider, fresh or fermented, in a mix or even on its own. Vigorous tall upright spreading tree with reddish bark. Annual producer of heavy crops. A recent U. Mass. study showed resistance to apple maggot fly. Bears young; remove fruit for the first year or two to avoid stunting growth. Blooms midseason. Z4-5. **ME Grown**.

10498 Cortland, $24.00



Thinning Apples

Thin your apple crop every year before July 4. Thinning reduces disease and pest pressure, increases fruit size, and encourages fruit bud formation for next year. It's the single most important thing you can do to promote annual fruiting. Commercial growers use sprays to force their trees to self-thin (abort). You can do it by hand. Snip off small apples with clippers or "pop" them off with your fingers. Leave the stem connected to the tree. If you pull off the entire stem, the remaining fruit may weaken, detach, and wind up on the ground. Leave 1–2 fruit per cluster. Space clusters about 3–4" apart.

Roy Slamm, a tribute by John Bunker

Every year at the Common Ground Country Fair I do a display of apples being grown in Maine. Many people come to see the display. It's a perfect conversation starter and a great way to interact with fairgoers. The display often inspires them to tell me about the ancient apples on their farms.

At the 1995 fair, Roy Slamm was one of those fairgoers who came to the booth. It was the first time I'd met him. He told me about an apple he called Canadian Strawberry and told me that I should come see his trees and taste the apple. Back home that night, I checked through my collection of 19th century literature for references to the apple. I found none. I dismissed the apple as nothing too important and forgot about it.

A year later at the '96 fair Roy returned, this time with his daughter Amanda. He insisted that I come to Solon. I said I would. A few days later I went to visit Roy a couple of hours away in South Solon. He had three of the trees so I knew they must be grafted. I also knew I had never seen this apple before. I tasted the fruit. That night I wrote in my journal, "went to Roy Slamm's and got Canadian Strawberry apples. Yes!"

That was a beginning of a 15-year friendship with Roy and my fascination with the Canadian Strawberry apple. Because the apple ripens right at Common Ground Fair-time, I have picked apples many times and brought them to display and taste. On more than one occasion it won our Fair taste test, beating out some other much better known varieties of that season (such as Cox's Orange Pippin and Chestnut).

I grafted a tree on our farm and began to spread Canadian Strawberry around New England and beyond through the Fedco catalog. We planted a specimen at the MOFGA heritage orchard of Maine apple varieties. Over the years I regularly visited Roy, and he and wife Liua Lee came to Palermo many times. I was able, with his help, to piece together some information about the apple.

On April 19, 1775, Isaac Davis of Acton, MA, was killed at the Old North Bridge in Concord. He was the first officer to die during the Revolution. Later he was memorialized as *the* Minute Man in the statue at the bridge. Around 1800 Isaac's son Ephraim moved to Solon and started the farm the Davis family continued to occupy for nearly 200 years. About 1910 Nathaniel and Dora Davis planted three grafted Canadian Strawberry trees on the farm. All three trees were still living and producing when Roy and his first wife Abby purchased the farm from Elmer and Asher Davis in 1971.

No one may ever know the origin of Canadian Strawberry—or "Strawberries" as Roy and Abby's neighbors called them. It might be a synonym of some other apple. One old timer picked them for over 50 years thought there is a possibility that the variety came from New York where it was called New York Strawberry. There is a slight chance it is another New York apple called Washington Strawberry although years ago I compared the two and decided against it. It also could be the same as another apple called Autumn Strawberry but I've never seen one. A few years ago I did locate one reference to Canada Late Strawberry grown at the Michigan Agricultural College in 1887. No description of the fruit exists.

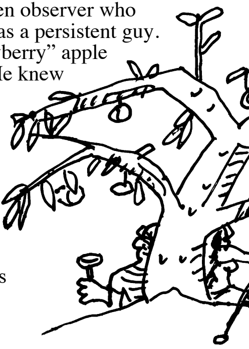
Canadian Strawberry could be one of the many extremely rare apple varieties that originated in small towns all over the eastern United States. Over the course of many generations of small diversified farms, ever observant farmers selected the best of what grew well on their own land, occasionally naming varieties and saving them locally for their friends and neighbors. It might even be from a seed or the seed of a seed brought from Concord, MA.

In our era of email and text messages, Roy was an anomaly. He regularly wrote cards and letters the old fashioned way. In November 2007 he wrote to me, "It was a spectacular apple year. Our Canadian Strawberry apple trees outdid themselves in production. Most of the fruit was perfect and delicious. [Roy never sprayed a thing.] Lamentably we lost one of the triad of grand lady trees. The most venerable hollowed trunk. Fell in a strong windy day."

Roy was not a pomologist. He was not really a fruit explorer. He was a fine woodworker and artist, a good father, good neighbor and a homesteader. He was also a keen observer who took pleasure in life. And he was a persistent guy. Were it not for Roy, the "Strawberry" apple might have been lost forever. He knew that he was the steward of something very special, and he was determined to see that it was not lost.

One of the last cards I received from him:
"Hey John,
A few frozen apples
clinging to the gnarled branches
with little snow hats above."

Thank you Roy.

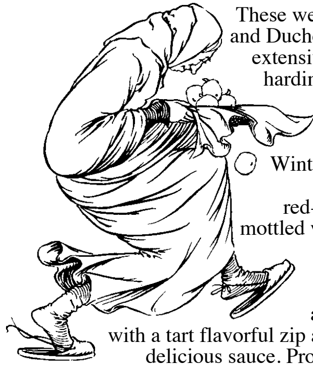


Cox's Orange Pippin Fall. Possibly a seedling of Ribston Pippin. Near Slough, Bucks, England, around 1825. Deservedly one of the three or four most famous of all apples. Not only one of the best eating apples ever but also one of the most sought-after varieties in modern apple breeding; parent or grandparent of many other varieties. Revered in the U.K. Medium-sized all-purpose aromatic fruit is red-orange to red with orange russet striping and wash. Perfectly balanced slightly subacid flavor and crisp juicy tender flesh improve with storage. Moderately vigorous moderately productive tree bears young and annually. Prefers cooler climates and higher pH (6.5-7.5+). The oldest Maine Cox's I know is about 40 years old, thriving in Mercer, Zone 4. Scab resistant. Blooms midseason. Z4-6. **ME Grown**.

10504 Cox's Orange Pippin, $24.00

DUCKING FOR APPLES ON HALLOWEEN.

Duchess of Oldenburg Late Summer. Russia, 17th c. Also called **Duchess**. In 1835 the Massachusetts Horticultural Society imported the first of many apple varieties from Russia. These were Alexander, Tetofsky, Red Astrichan and Duchess of Oldenburg. Duchess was planted extensively wherever growers needed extreme hardiness and is still quite popular in most of northern New England. Aroostook County's favorite apple. Parent of many varieties including Dudley Winter (#**10636**) and Canada's famous New Brunswicker. Medium-sized round red-striped fruit is irregularly splashed and mottled with crimson. Yellow firm fine-grained crisp tender juicy subacid aromatic flesh. Highly esteemed for all sorts of cooking; Duchess is one of the best pie apples for coldest districts. Makes a pie with a tart flavorful zip and cooks up quickly into thick creamy delicious sauce. Prolific precocious small to medium-sized adaptable tree. Duchess seedlings are used as an extremely hardy rootstock called Borowinka. Scab resistant. Blooms early-midseason. Z3-4. **ME Grown**.



10633 Duchess of Oldenburg, $24.00

Dudley Winter Fall. (Duchess x Hyslop crab) Castle Hill, ME, about 1877. Also called **Dudley** and **North Star**. Medium-sized slightly flattened fruit is buttery yellow, overspread with red stripes and splashes. Firm but tender, juicy aromatic subacid flesh for fresh eating and cooking. In northern areas—where it reaches its prime—it also keeps into winter. Small vigorous spreading drooping tree. The story is that orchardist John Wesley Dudley's daughter Grace planted seeds from a Duchess tree pollinated by a Hyslop crab. The resulting seedling became the most widely planted new variety in the North at the turn of the previous century. Probably still the most well-known Maine apple outside the state. JW left Castle Hill for Klickitat County in south central Washington a few years later to help found a fledgling apple industry. Ouch! And it's almost certainly no coincidence that the Perham Fruit Company was founded in Yakima shortly thereafter. Our Dudley scionwood comes from a small abandoned orchard just north of Castle Hill (near Perham). Somewhat scab susceptible, more so than Duchess. Extremely hardy. Natural semi-dwarf. Blooms early-midseason. Z3-4. **ME Grown**.

10636 Dudley Winter, $24.00

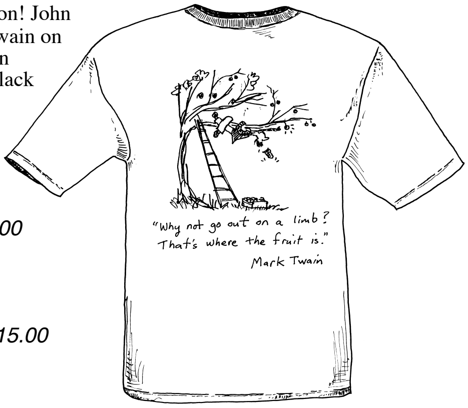
T-shirt What a combination! John Bunker illustrates Mark Twain on an unbleached 100% cotton crewneck. Ecru shirt has black design highlighted by red apples. Printed in Maine.

7511 T-shirt small, $15.00

7512 T-shirt medium, $15.00

7513 T-shirt large, $15.00

7514 T-shirt extra-large, $15.00



Esopus Spitzenburg Fall-Winter. Unknown parentage. Esopus, NY, 18th c. Herman Melville wrote in his 1853 *Bartleby, the Scrivener*: "Copying law-papers being proverbially a dry, husky sort of business, my two scriveners were fain to moisten their mouths very often with Spitzenburgs, to be had at the numerous stalls nigh the Custom House and Post office." Turkey and Nippers chose well. For over 200 years the apple has been a choice dessert and culinary variety, mentioned in nearly every list of best-flavored varieties. Slightly subacid, crisp and juicy. Medium-large bright-red round to mostly conic fruit, covered with russet dots, not unlike a slightly more conical Starkey. Excellent acid source for sweet or fermented cider. Moderately vigorous tree, with easily trained wide-angle branches. Bears moderate crops. Susceptible to scab though we don't spray ours and have been happy with the fruit quality. Blooms mid to late season. Z4-7.

10714 Esopus Spitzenburg, $24.00 **ME Grown**

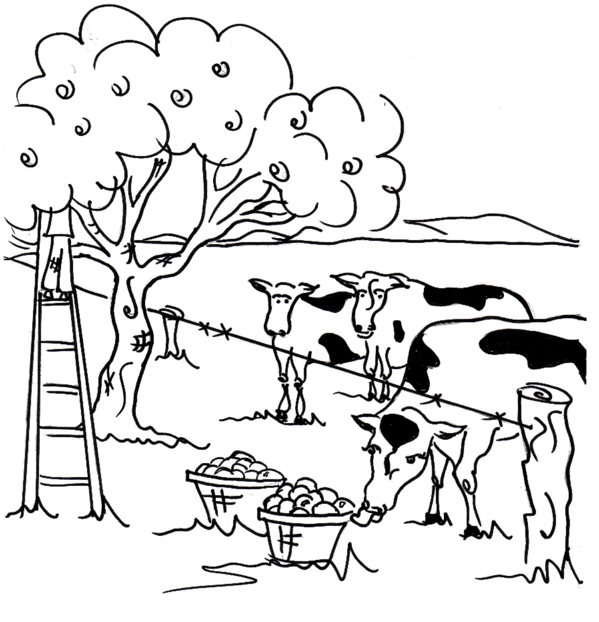
30714 Esps Spitzenburg on M111 semi-dwarf stock, $26.00

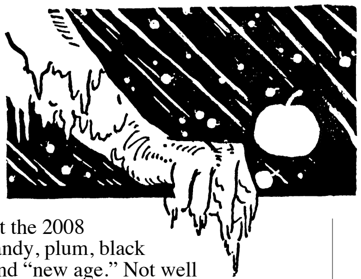
Fameuse Early Fall. Unknown parentage. Canada, before 1700. Also called **Snow**. Excellent eating, sauce and cider apple. The 1865 Department of Agriculture yearbook sums it up: "Flesh remarkably white, tender, juicy…deliciously pleasant, with a slight perfume.…No orchard in the north can be counted as complete without this variety…It is just so good that everybody likes to eat of it; and when cooked, it is white, puffy, and delicious." Medium-small roundish ruby-red thin-skinned fruit. Tender snow-white flesh, aromatic, juicy, sweet and tart. Famous in Maine for over 150 years and still found in dooryards and orchards around the state. Keeps until late December. Thought to be a parent of McIntosh (#**11569**). As one of the few apples that comes relatively true-to-type from seed, occasional "variations on a Fameuse theme" can be found in old orchards. Upright-spreading rather vigorous moderately tall very productive long-lived tree. Susceptible to scab. Blooms mid-late. Z3-5. **ME Grown**.

10768 Fameuse, $24.00

Freedom Early Fall. [NY 18492 (Macoun x Antonovka)] x NY 49821-46 [Golden Delicious x F2 26829-2-2 ((Rome x *M. floribunda* 821) x (Rome x *M. floribuna* 821))] NY Stn, 1983. Very high quality and highly disease-resistant all-purpose apple ripens in early October and keeps until first of the year. Recommended for fresh eating, sauce and juice. We still haven't tried it in a pie. Large roundish fruit almost entirely covered with bright red stripes. Juicy firm spicy-flavored flesh. Vigorous spreading spur-forming productive annually-bearing precocious tree. From the same breeding program that developed Liberty. Cross made in 1958, tested for nearly 25 years before release and considered to be immune to scab and highly resistant to powdery mildew, cedar apple rust, and fire blight. Recommended as a pollinator for other varieties. Blooms midseason. Z4-7. **ME Grown**.

20816 Freedom on Bud 118 semi-dwarf stock, $24.00



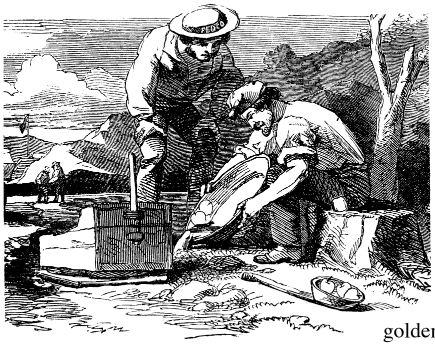


Frostbite Fall-Winter. MN 447. Uncertain parentage. U Minn, 2007. Seed planted at the University of Minnesota before 1936, but unnamed until 2008. This massively flavored dessert apple—not for the faint of heart—provides a whole new level of culinary experience. Likely the most distinctive and unusual apple I've ever tried. Descriptions shouted out by tasters at the 2008 Common Ground Fair included paraffin candy, plum, black raspberry, lollipop, gooseberry, rhubarb, and "new age." Not well suited to fermentation due to its low sugar content (S.G. 1.044), but perhaps that's why, as one fairgoer commented, "those who like it really like chocolate!" The roundish fruit is medium-sized and entirely covered with dark bluish-purple stripes. The aromatic crisp crystalline flesh is an apricot-orange color with occasional red staining, and so juicy it'll run down your hand. Bears fruit nearly every year. Not recommended for warmer districts: one Indiana grower calls it "Frost Bitten." Blooms early midseason. Z4-6. **ME Grown**.

10834 Frostbite (MN 447), $24.00

Golden Russet Winter. Uncertain origin. Thought to be from England, New York or New England. The champagne of cider apples, ripening late in fall, when the root cellar has finally cooled off and the best cider is ready to be made: sweet, balanced, thick and smooth. Also recommended as a sharp component for fermented cider. Excellent eating; keeps all winter and well into spring. Round medium-sized hard fruit; uniform in size and shape, softens as winter progresses but maintains its superior sweet flavor. Solid deep yellow *golden* russeted skin! Medium to large vigorous diverging upcurving tree with silvery-green leaves on long willowy branches. Scab resistant. Blooms early to midseason. Z4-6.

30933 Golden Russet on M111 semi-dwarf stock, $26.00



GoldRush Winter. Coop 38 {PRI 2750-6=[Coop 17 (PRI 1689-100) x Golden Delicious]} PRI Coop, 1994. The first of the new disease-resistant varieties from the well-known Purdue-Rutgers-Illinois apple breeding program to have superior storage qualities. Not only that, but it's probably *the* best-tasting apple to come out of that program. Love those Golden Delicious qualities! Medium to large round-conic fruit has uniform deep greenish-yellow opaque chewy skin that turns golden in storage. Creamy white green-flecked flesh is hard, very crisp, juicy and tart. A solid apple with excellent flavor. Serve them for dessert in February and March and no one will be disappointed. Ripens very late in fall, but will usually do so successfully in central Maine. Keeps until early May in the root cellar. Very precocious. Highly resistant to scab and powdery mildew. Moderate fireblight resistance. Moderately vigorous tree with a strong central leader. Blooms midseason to late.

20947 GoldRush on Bud 118 semi-dwarf stock, $24.00

Goodland Early Fall. Morden 354 (Patten Greening x open-pollinated) Canada Research Stn, Morden, Manitoba, selected in 1925, introduced in 1955. Excellent for dessert and sauce. Of the extremely hardy Morden introductions, Goodland is often considered the best fresh eating. Medium to large, roundish-oblate fruit with creamy green skin striped and blushed with red. Crisp tender juicy aromatic sweetly subacid creamy white flesh. Keeps till early winter. Medium-tall annually productive tree. While probably not hardy to Zone 2, still best grown in the northernmost U.S. Z3-4.

10951 Goodland, $24.00

Grimes Golden Fall. Unknown parentage. West Virginia, c. 1804. All-around excellent variety grown in old Maine orchards for over 100 years. Medium-sized roundish fruit with opaque yellow skin, scattered with grey russet dots and an occasional faint blush. Thought to be a parent of Golden Delicious. Tart citrusy crisp dense firm fruit is excellent for dessert and cooking: wonderful spicy fresh eating and wonderful apple sauce. Makes a thick sweet cider and a good single-variety hard cider: light and fruity. Tends to begin dropping fruits before you can pick them, but fret not; they're ready to eat. Just collect them off the ground as they fall and use them up. Then pick the rest off the tree and store in the root cellar until spring. Productive, annual bearing, precocious. Highly recommended. Z4-6.

10996 Grimes Golden, $24.00 **ME Grown**
60996 Grimes Golden on Bud 9 semi-dwarf stock, $26.00

Haralson Winter. MN 90 (Malinda x open-pollinated) U Minn, 1923. One of the first introductions from the Minnesota Horticultural Research Center and still the most commonly grown apple in Minnesota. A nearly perfect all-purpose apple for those in northernmost areas. Pleasant sprightly subacid flavor for fresh eating, pies, baking, sauce, freezing and cider. Roundish-conic bright red striped to mostly solid red fruit, with moderately conspicuous dots and some russeting. White firm crisp juicy flesh. Highly productive and reliable. Harvest in October, keeps until March. Extremely hardy naturally small tree with a strong central leader and well-formed wide-angled branching habit. Sets fruit heavily, thin some of the small apples to ensure larger fruit size and encourage annual cropping. Fruit quality and size also seems to respond noticeably to better soils. Exhibits resistance to apple maggot, codling moth, cedar apple rust, fire blight, even scab. Blooms late. Z3-5.

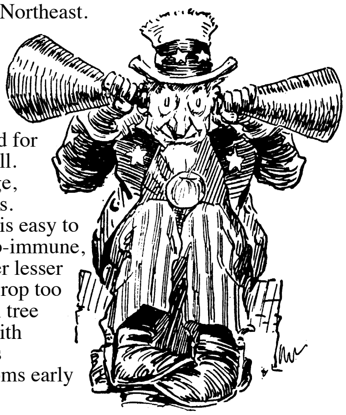
11014 Haralson, $24.00
31014 Haralson on M111 semi-dwarf stock, $26.00

Honeycrisp Winter. MN 1711 (Keepsake x open-pollinated) U Minn, 1991. Medium-large fruit, described as "explosively crisp," mottled and striped red over yellow. Cream-colored flesh is sweet and juicy with hard snapping-crisp texture. Mild aroma and subacid flavor are top quality in September and improve steadily in storage. Unusual because it ripens in early fall yet keeps up to seven months in the root cellar. This year our fruit was almost as crisp in June as it was in October. First of the many excellent University of Minnesota introductions to receive large-scale commercial attention, now has a huge following. Has become our best-selling apple. Probably best planted north of Massachusetts; has not performed as well in warmer districts. Tends towards annual bearing. Relatively small low-vigor upright spreading tree. Above-average scab resistance. Blooms mid-late season. Z3-4.

11113 Honeycrisp, $25.00 **ME Grown**
21113 Honeycrisp on Bud 118 semi-dwarf stock, $26.00
61113 Honeycrisp on Bud 9 dwarf stock, $26.00

Kavanagh Fall. Unknown parentage. Damariscotta Mills, ME, 1790. Also called **Cathead** because of its distinctive shape with large stem end tapering to a small calyx end, typical of Irish apples. A large apple you see once and never forget. About half russet and half deep rich lime green. Slightly yellow flesh is mild, moderately crisp, moderately tart, and subtle. Last fall's orchard crew called it, "vibrant, spunky, grassy and earthy with a nice punch." Good for fall and early winter eating, excellent for cooking and drying. Foams up into creamy yellowish sauce, tart, tasty, medium-thick, a bit lumpy, no sugar necessary. The skin dissolves so there's no need to strain the sauce. Locally renowned shipbuilder James Kavanagh brought this apple from Ireland as a seed or maybe a small tree when he moved to Maine. We first gathered our scionwood with historian and Kavanagh enthusiast George Dow from what we thought was the last living tree. We've since discovered a half dozen more, one as far away as Freeport and another on the Blue Hill Penninsula. Grows to be a huge long-lived tree. Blooms late. Z4-6. **ME Grown**.

11354 Kavanagh, $24.00



Liberty Late Summer-Fall. NY 55140-19 [Macoun x PRI 54-12 (PRI Coop complex cross includes Rome Beauty, Jersey Black, McIntosh, Wealthy and *M. floribunda*)]. NY Stn, 1978. Often cited as the best of the disease-resistant varieties, particularly in the Northeast. Somewhat similar to Macoun. Handsome medium-sized round-conic bluish-pinkish-red apple with crisp white flesh of very good dessert quality when dead ripe. Excellent cooking and cider too. Recommended for single-variety cider. Keeps till late fall. Begins fruit production at an early age, bearing consistent heavy annual crops. Naturally well-structured sturdy tree is easy to care for. Considered to be 100% scab-immune, though not resistant to insects or other lesser apple diseases. Allowing Liberty to crop too heavily at a young age can stunt final tree size and reduce productivity. Even with mature trees, thinning fruit clusters is important to maintain fruit size. Blooms early to midseason. Z4-6.

11484 Liberty, $24.00 **ME Grown**
31484 Liberty on M111 semi-dwarf stock, $26.00
61484 Liberty on Bud 9 dwarf stock, $26.00

The scab year from hell?

In an email last summer one of our orchard pals described the summer of 2011 as the "scab year from hell." Even some of the new "disease-resistant" varieties are turning out to be not so. We, on the other hand, had many excellent scab-free varieties this year and we *never* spray for scab. We prefer the old-time heirlooms and the less common modern sorts. By choosing your varieties with some care, you should do fine and never have to spray for scab. Check our apple descriptions. The worst culprits are all exposed!

Macoun Fall. (McIntosh x Jersey Black) NY Stn, 1923. This is an apple with a near cult following even though practically no one seems to know how to pronounce the name. (It rhymes with town, not tune!) Medium-sized ribbed lobed truncate fruit. Dark purplish-red blush mostly covers the green skin. The very white flesh is crisp but not really hard. The rich flavor is sweet and aromatic. Very juicy. Excellent for fresh eating. Somewhat vigorous, upcurving tree with stout curved branches may require some training. Not tall. Moderately productive. Although susceptible to scab, the fruit appears to be less affected than McIntosh. Appears to show some natural resistance to insect damage. A few years ago while attending an apple festival in England I came upon a plate of Jersey Blacks, the mysterious parent of Macoun. Mysterious because no one seems to know a thing about them. I wanted to sneak a bite but resisted the temptation. In fact, didn't even get a photograph. My camera battery was dead! Blooms mid-late season. Z4-6.

61537 Macoun on Bud 9 dwarf stock, $26.00

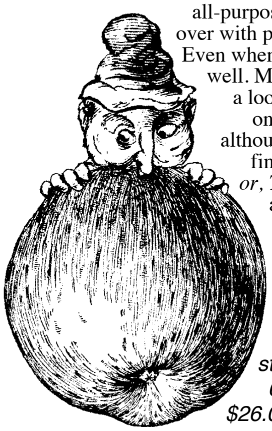
McIntosh Fall. Thought to be a seedling of Fameuse or perhaps St. Lawrence x Alexander. Dundela, Ontario, 1811. First discovered by John McIntosh on his farm near the St. Lawrence River. Originally called Granny's Apple, then McIntosh Red, sometimes Gem, and finally McIntosh. Certainly the most important apple in the Northeast. Although not planted in many other locations, it grows to perfection in our cool climate. There are many strains of McIntosh, some striped, some blushed, some solid red. Recent strains have been selected for traits other than flavor, and the variety has gotten a bad reputation. This strain has green ground color overlaid with red stripes and blush. It was planted in 1906 in Mercer, ME. Of all the strains we have sampled, this one has the best "Mac" taste. This is a delicious aromatic apple. Annual cropper. Large beautifully rounded spreading strong easily managed tree. Very susceptible to scab but has shown resistance to apple maggot fly. Does not keep well in home storage. Blooms midseason. Z4-5. **ME Grown**.

11569 McIntosh, $24.00

Milo Gibson Fall. Unknown parentage. Possibly from Oregon. A mid to late fall dessert apple with a unique and wonderfully strong licorice flavor. Not tart but very rich, full and sweet. Shaped like a Mac—roundish slightly flattened stem and stern—with the coloring of a Ben Davis. Skin is muted yellow, about two-thirds covered with a fairly solid blush of red, overlaid with some stripes of slightly darker red. Hermon, ME, grower Don Johnson brought a bag of fruit to me several years ago. It turned out to be *the* hit at two taste tests later that fall. One woman even tracked him down and begged for a tree. He later wrote to me, "The licorice flavor seems to vary from apple to apple. In some I don't even notice it—even when I'm looking for it, and in others it is quite pronounced." The late Milo Gibson (1905-1974) was one of the founders of the North American Fruit Explorers (NAFEX) many years ago. No one seems to know if he discovered or bred or even re-named this delightful apple, but noted apple collector Richard Fahey wrote, "I feel an affection for old Milo when I eat one of these apples." Blooms mid-late season. Z4-7. **ME Grown**.

11614 Milo Gibson, $24.00

Northern Spy Winter. Chance seedling. East Bloomfield, NY, about 1800. One of the most famous of all heirloom apples. Very large delectable all-purpose pink fruit has yellow background covered all over with pink and light red stripes. Very juicy and tender. Even when the soft skin bruises, the fruit keeps extremely well. Makes an excellent pie and cooks up quickly into a loose mild sauce. No need to remove the skins. Its one drawback is being slow to come into bearing, although for us it's been worth the wait. Last winter I finally tracked down a copy of *The Northern Spy; or, The Fatal Papers: A tale of South Carolina*, the amazing 19th century dime novel of the apple's namesake. A must read! Medium-to-large moderately vigorous long-lived tree. Prefers fertile well-drained soil. Good scab resistance. Leafs out late and blooms late season. Z4-6.



11762 Northern Spy, $24.00 **ME Grown**

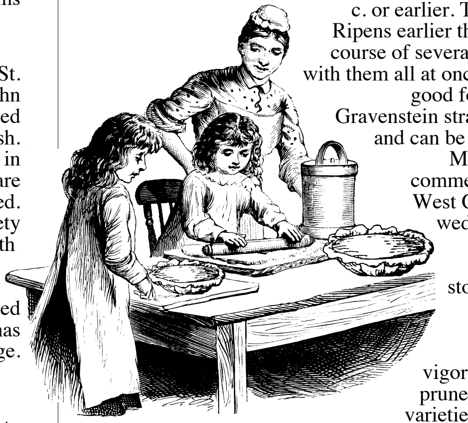
41762 Northern Spy on M7 semi-dwarf stock, $26.00

61762 Northern Spy on Bud 9 dwarf stock, $26.00

Pomme Grise Early Fall. Unknown origin. Probably brought to Canada's St. Lawrence Valley by French immigrants, may have originated in Europe as early as the 17th c. Found its way into Maine about 150 years ago. Small oblate russet with a longtime reputation as one of the very best dessert apples. Firm, crisp, juicy, rich, sub-acid and aromatic, with interesting aftertastes. Superb fresh eating. Smooth skinned and mottled russet with greenish patches, and scaly areas of shinier russet. Not so opaque as others. The combination of the chalky russet and the green ground color give it its grey (grise) appearance. Vigorous dense round spreading tree prefers northern locations. Ours has been consistantly productive. Keeps fairly well, still crunchy in January. Blooms midseason. Z3-5. **ME Grown**.

11954 Pomme Grise, $24.00

Red Gravenstein Late Summer. Uncertain Italian or German origin, 17th c. or earlier. The most famous of all pie apples. Ripens earlier than most cooking apples, over the course of several weeks so you don't have to deal with them all at once. But they don't keep well. Also good for dessert and sauce. Of the many Gravenstein strains, this one is stripey purple-red and can be found in old orchards in southern Maine. Gravensteins are still grown commercially in Nova Scotia and on the West Coast. Last summer we attended a wedding in northern California in the heart of what I figured was Gravenstein country. When we stopped for lunch at a small grocery store I headed straight for the produce cooler. There they were, looking just like home! Large vigorous perfectly shaped tree. Easy to prune. Triploid, will not pollinate other varieties. Blooms early. Z4-8. **ME Grown**.



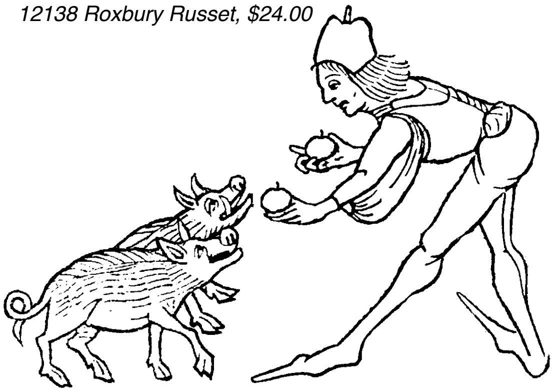
22058 Red Gravenstein on B118 semi-dwarf stock, $24.00

Rhode Island Greening Fall-Winter. Green's Inn, near Newport, RI, about 1650. Also known as **Greening**. One of the most important apples of the 19th century and *the* classic New England cooking apple. Great for pies, also excellent for fresh eating. Large green fruit usually has a tannish blush. Light yellow-green flesh is crisp and tart. The tree itself will grow to be rather large with lower branches that may weep slightly. Prune to have the first scaffold relatively high; too low and you might find your fruit growing on the ground. Due to its high-quality fruit and adaptability to a range of soil conditions, this apple eventually became popular all over New York and New England. Keeps until late winter. Less hardy than Baldwin (#**10120**). May not do well in northern-most districts although old trees can still be found in central Maine. Susceptible to scab; keep it open and airy. Late-season bloomer. Z4-7. **ME Grown**.

12112 Rhode Island Greening, $24.00

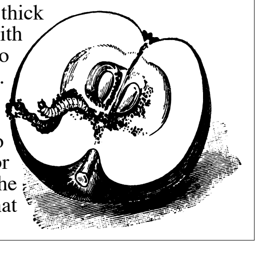
Roxbury Russet Winter. Roxbury, MA, early 1600s. One of the best late-winter dessert apples: rich, spicy and juicy. The aromatic juice is highly recommended for both single-variety cider and blends, fresh or fermented. Hard medium-large oblate-conic-angular green fruit mostly covered with greenish to yellowish-brown russet. Not uniform in size, shape or color. Keeps until late spring. Medium-to-large vigorous spreading tree. Probably the first named American apple variety. Together with (#**10120**) Baldwin and (#**12112**) Rhode Island Greening, one of the big three commercial apples in New England for much of the 19th century. We're on a mission to re-establish trees in the Roxbury area. Last spring I visited and pruned a thriving young tree in nearby "JP." We hope to see them all over the city one day. Scab resistant. Z4-6. **ME Grown**.

12138 Roxbury Russet, $24.00



Codling Moth Trap

One of the worst apple pests in much of the country is codling moth. Here's a method for reducing your population. Cut a 4–8" wide strip of corrugated cardboard. Wrap it around the trunk of your apple tree three feet or so above the ground. The cardboard should be a couple of layers thick with the corrugated "tubes" facing vertical. Fasten with string or tape. Remove and check regularly (every two weeks or so) for moth pupae under or in the cardboard. Squish them or burn the cardboard. Then replace or put up a new piece. Set up the cardboard traps at bloom time and leave them up all summer and into fall. Or check with you local extension service for timing. After discovering earwigs living under the cardboard sleeves on some of our trees, we read that earwigs eat the codling moth larvae.



Orchard Ladders

Sturdy lightweight traditionally shaped wooden orchard ladders have wide bottoms for stability and narrow tops for easy handling and placement.
Contact the manufacturer:
Peter Baldwin
207-722-3654
baldwin@acadia.net

Somerset of Maine Late Summer-Early Fall. Unknown parentage. Mercer, Somerset County, ME, before 1850. Also known as **Somerset**. Large oblate all-purpose fruit has buttery yellow skin mostly covered with stripes and a wash of beautiful soft rusty red. Tender juicy subacid flesh. In the 1907 *Maine Agricultural Experiment Station Report*, WM Munson wrote, "It is an excellent apple and, when known, is highly prized as an early market variety." Makes a really good single-variety September pie. The fruit keeps into late fall. Very vigorous spreading tree. Has been annually bearing in our orchard. Still a local favorite here and there around the state. One of Mercer's several great contributions to the pomological world. (Another, of course, is 96-year-old Francis Fenton.) Blooms mid to late season. Z4-5. **ME Grown**.

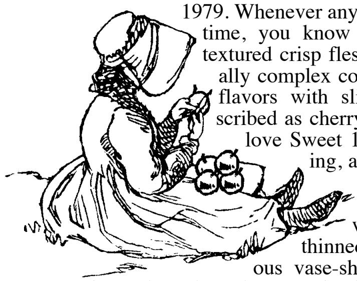
12292 Somerset of Maine, $24.00

Starkey Fall-Early Winter. Seedling of Ribston Pippin. Vassalboro, ME, 1820. A superb fall fresh-eating apple with an exquisite combination of crisp sweetness and tartness reminiscent of a perfectly ripe Concord grape. Medium-sized roundish fruit is rosy red, covered almost completely with fine lines, shades and stripes of darker reds, and sprinkled with pronounced white dots. Tendency towards biennial bearing although it will produce a crop every year if pruned and thinned. Keeps well into winter. We begin to get into them in late September, with perfect eating around New Year's. Still quite decent in February. Originated on the farm of Moses Starkey, a Quaker minister in North Vassalboro. Listed in *The Apples of New York* but never gained popularity outside central Maine. Blooms early to midseason. Z4-5. **ME Grown**.

12340 Starkey, $24.00

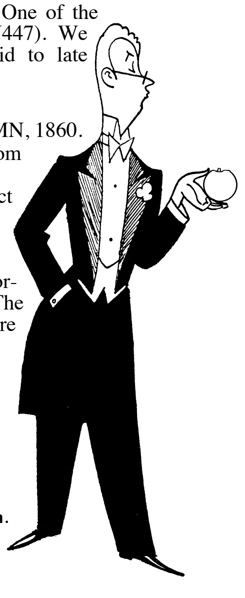
State Fair Summer. MN 1639 [Mantet (Tetofsky x McIntosh) x Oriole (Duchess x open-pollinated)] U Minn, 1978. One of the best-flavored early apples for northern growers. The result of a 1949 breeding project that merged several of our most important hardy summer/fall varieties. May have inherited its white flesh and aromatic fresh eating quality from McIntosh. From Tetofsky, its round shape and crisp, tender, juicy flesh. From Oriole, its fine-grained texture, subacid flavor, and its rounded medium-sized tree. From Mantet, the medium-sized fruit's glossy red skin and all-around excellent flavor. From Duchess, its productive and precocious nature, and its excellent culinary quality. From all these ancestors comes its great hardiness. It has reportedly survived and fruited after temperatures of –40°. Unlike all its forebears, it has the enviable quality of keeping very well for a summer apple. Ripens in time for the Minnesota State Fair (August 25 this year.) Z3-5.

12288 State Fair, $24.00



Sweet 16 Early Fall. MN 1630 (MN447 x Northern Spy) U Minn, 1979. Whenever anyone eats a Sweet 16 for the first time, you know they will be surprised. Fine-textured crisp flesh contains an astounding unusually complex combination of sweet, nutty and spicy flavors with slight anise essence, sometimes described as cherry, vanilla or even bourbon. I always love Sweet 16 season. Truly excellent fresh eating, although it is too sweet for some palates. Round-conic bronze-red medium-sized fruit, striped and washed with rose-red. Annual bearer if thinned. Very hardy moderate-sized vigorous vase-shaped tree grows upright with willowy branches that get loaded with fruit but do not break. Grower-friendly. Reaches its best flavor and texture in northern districts. Some resistance to scab. Keeps till midwinter. One of the wonderful progeny of (#**10834**) Frostbite (MN447). We hope to introduce more of them! Blooms mid to late season. Z3-6. **ME Grown**.

12466 Sweet 16, $24.00

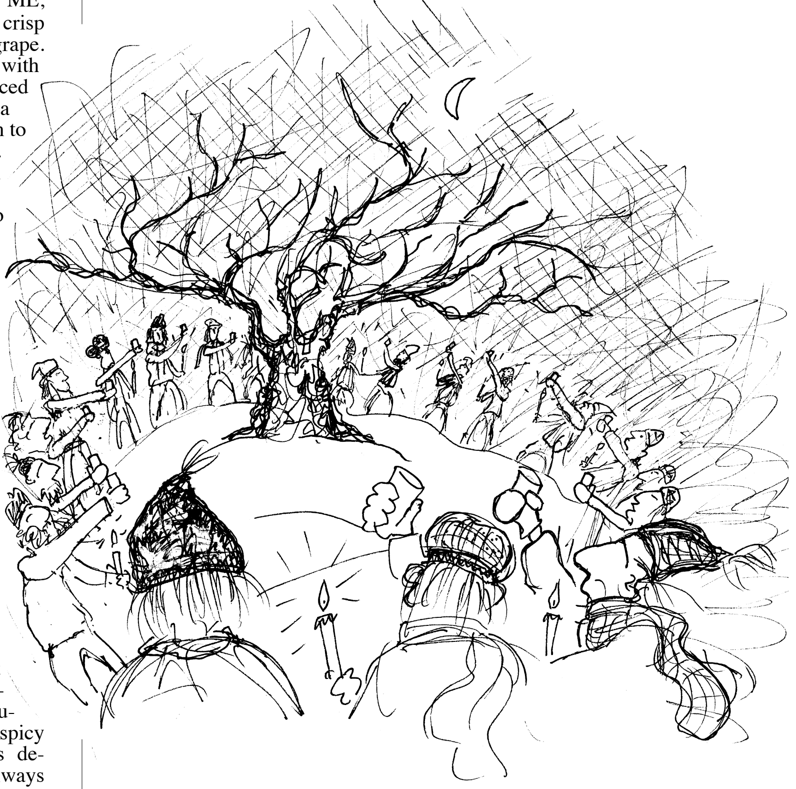


Wealthy Fall. Cherry crab seedling. Excelsior, MN, 1860. A Maine native of sorts, the seed having come from Bangor. Superb all-purpose fall apple, one of the most famous of all hardy varieties. With its perfect texture and complex flavors, Wealthy is considered to be one of *the* best apples. I agree. Our old friend, orchardist Francis Fenton, believes Wealthy—not McIntosh—deserves to be the favorite commercial apple of northern New England. The trees his father planted in Mercer 103 years ago are still going strong. Round-oblate medium-sized fruit is pale greenish-yellow streaked with carmine. About as firm as McIntosh. Tender very juicy sweet subacid flesh is white, often stained red. Good eating and even better cooking. Wonderful pies! Good acid source for fermented cider. Ripens over a long period. Productive moderately vigorous long-lived small to medium-sized tree. Blooms early. Z3-4. **ME Grown**.

12616 Wealthy, $24.00

Williams Pride Summer. Co-op 23 [PRI 2845-1=(PRI 1018-101 x NJ50)] PRI Coop, 1988. Probably the most popular summer apple among the newly developed disease-resistant introductions. It's actually crisp, which is rare for a summer apple. Deep purple roundish-conic irregularly shaped fruit, highlighted with areas of glowing rosy red and covered with a thin bloom. Light cream-colored flesh, with red staining just under the skin, is firm, crisp and very juicy. Has a nice acidic blend of tart and sweet, reminiscent of Fameuse. Long ripening period means you don't have to eat them all at once. Vigorous annually bearing tree with some biennial tendency. Well-shaped with strong right-angled branches that do not require careful training. Highly resistant to fireblight, cedar apple rust and sooty blotch, resistant to powdery mildew. Scab immune. Blooms early-midseason. Z4-7. **ME Grown**.

12667 Williams Pride, $24.00



Wassail by Cammy Watts

January 18th, Old Twelfth Night, and time to wassail our orchard. The house is warm and thick with the smells of cider mulling on the woodstove as friends arrive bearing stews, homemade cheeses, pickles and kraut—the rewards of last summer's labors. Apples and cabbages simmer together, and gingerbread smothered with apple molasses tempts my sweet tooth. We pull something we think is hard cider from the root cellar; it turns out to be some bad wine made years ago and forgotten. It tastes surprisingly good on this night of celebration.

John teaches us the wassailing song that he has rewritten to highlight Maine apples, Black Oxford, Starkey and Gray Pear-a-may (it needed to rhyme with "day") and to honor his orcharding mentors, Francis Fenton and Earland Goodhue.

Full of good cheer, we bundle up and, with mugs and candles in hand, head out into the subzero night. The full moon lights the path through the snow that Emily and I dug earlier that day. It leads us to the orchard, and we circle the chosen apple tree. We pass the bottles of hard cider only to find that they have frozen in the cold. I tuck one inside my jacket in hopes it will thaw before it is time to toast. John gives us parts, and in succession we implore the tree to give us cap-fulls, hat-fulls, barrel-fulls and even cellar-fulls of fruit next year. We impale a piece of toast on a branch as an offering. As we pick up the wassailing song again, a deer, who suspiciously resembles Elizabeth Sugg, dances and prances among us. Twenty-five wassailers bang pot lids and hoot and holler to scare the pesky beast away. When quiet returns, we raise our mugs to the tree and dream of a bountiful harvest and plenty of cider in our cellars.

August 18th, the first Garden Royals are ready to pick, and the caps, hats, barrels and root cellar are ready for filling.

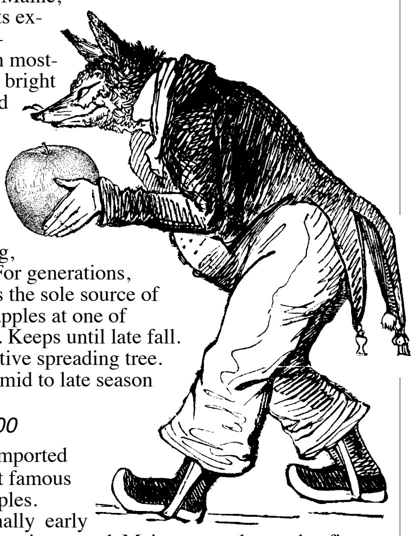
ME Grown = grown in Maine by a member of the Fedco growers coop.

Winekist Summer. Unknown parentage. Morris Towle introduction, Winthrop, ME, 20th c. A very high-quality red-fleshed all-purpose fruit. Skin is wine red with areas and stripes of darker red and very small white dots; the overall effect is dark red by mid July. Very juicy coarse firm flesh is almost solid beet red: a real eye popper! Ripens about September 10 in central Maine. Medium-small fruit is quite good for fresh eating and a great addition to cider or sauce. Leaves are tomentose (soft and woolly) and have a dark reddish cast to them. Blossoms are light pink. Wood, when you cut into it, is pink. Tree is a natural semi-dwarf. Developed by the orchardist and variety collector Morris Towle (1911-1993). Saved for posterity by orchardist and collector Earland Goodhue of Sidney. Bears young and annually. Blooms early to midseason. Z4-6. **ME Grown**.

12680 Winekist, $24.00

Wolf River Fall. Alexander seedling. Near Wolf River, WI, 1875. Perhaps the most famous old-time apple in Maine, likely due to its catchy name and its extremely large—even huge—round-oblate fruit. Pale yellow-green skin mostly covered with pink, deep red and bright crimson. Almost always has a vivid yellowish-greenish russety splash around the stem. Creamy-white coarse firm-but-tender flesh. Aromatic subacid flavor is very good for cooking. Makes an excellent baked apple and a decent pie. Not much good for fresh eating, but particularly tasty when dried. For generations, Perkins Orchard in Monmouth was the sole source of Wolf River for the famous baked apples at one of Manhattan's most elite restaurants. Keeps until late fall. Large moderately vigorous productive spreading tree. Excellent scab resistance. Blooms mid to late season Z3-5. **ME Grown**.

12727 Wolf River, $24.00



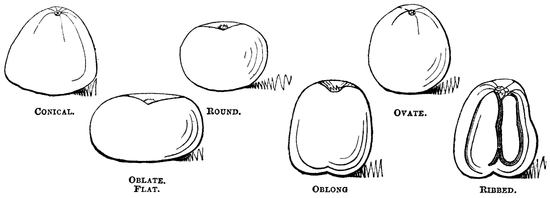
Yellow Transparent Summer. Imported from Russia, 1870. One of the most famous northern New England summer apples. Heavy annual crops of exceptionally early light clear-yellow fruit, some years in central Maine as early as the first week of August. Often despised by those who don't understand how to use them. I love the apple but it took some years to click on its real potential. This is primarily a cooking apple. We begin to pick a few each day when the seeds are just barely beginning to turn a little tan. At that point the fruit is firm, tender and crisp. We cook these in our morning oatmeal. Or we make a dessert or a larger pot of sauce. They cook up in minutes—the skin dissolves almost instantly, no food mill is needed. Not a pie apple: they don't hold their shape. By the time the seeds are brown, we've used up all of them. If you wait until they begin to drop, you are in trouble. They turn to mush inside and become inedible. Moderately vigorous medium-to-small upcurving tree with yellowish bark and foliage. Never any scab. Blooms midseason. Z3-5. **ME Grown**.

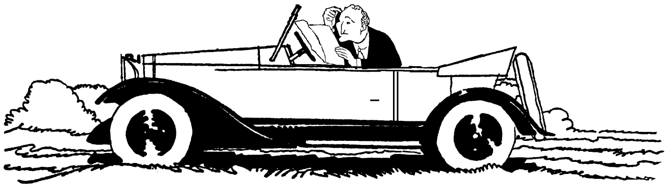
12777 Yellow Transparent, $24.00

Zestar Late summer. (State Fair x MN 1691) U Minn, 1999. Extremely hardy high-quality mid-late summer dessert apple. Medium-sized blocky round yellow-green fruit, partially to completely covered with red stripes and solid red. Juicy and crisp with a well-balanced acid/sweet flavor. Michael Phillips, New Hampshire orchardist and author of *The Apple Grower*, said to me, "When you tree-ripen Zestar, it's fabulous." Northern Maine orchardist Steve Miller added, "That's an impressive apple. From the standpoint of appearance and quality, they're first rate." Keeps in cold storage up to 7 weeks. Tree has moderately vigorous upright form, excellent horizontal branching habit makes it easy to train and prune. Precocious and annual-bearing. Blooms early season. Z3-5.

12796 Zestar, $24.00

32796 Zestar on M111 semi-dwarf stock, $26.00





Where can I taste that apple?

While we pride ourselves with our variety descriptions, there's nothing like the real thing. No words can compare to the taste. Frequently I'm asked, "Where can I taste a ….?" Here are a few suggestions.

The best place to taste apples in Maine is the **Great Maine Apple Day**, Sunday, October 23, 2011, at MOFGA in Unity.

Maine:

Visit the orchards near you. Call the Maine Dept of Ag at (207) 287-3491 or visit them online at getrealmaine.com for a complete list of the orchards in Maine. Many have unusual varieties. Even one or two rare finds can be worth the trip. Below are a few orchards with wonderful collections. I'm sure there are others. Don't be frustrated if you call and reach no one. Just go. By September most of them are open 6 or 7 days a week.

- Ricker Hill Orchards, Turner, Androscoggin County (207) 225-5552, www.rickerhill.com. Organic apples and more, mostly modern varieties.
- Sweetser's Apple Barrel and Orchards, Cumberland Center, Cumberland County (207) 829-3074, www.maineapple.com. A great collection of 39 old and new varieties. Their pride and joy is an ancient Rolfe tree. Don't miss it.
- Bailey's Orchard, Whitefield, Lincoln County (207) 549-7680. One of the largest collections of old varieties in the state. Pears, plums and crabapples, too.
- Lakeside Orchards, Manchester, Kennebec County (207) 622-2479, www.lakesideorchards.com. Organic apples and a good collection of mostly new varieties.
- Maine-ly Apples, Dixmont, Penobscot County (207) 234-2043, www.mainelyapples.com. A growing collection of old and new varieties.
- Rollins Orchard, Garland, Penobscot County (207) 924-3504. A very good collection of over 20 unusual old varieties. Plums and pears, too.
- Sandy River Orchard, Mercer, Somerset County (207) 587-2563, sandyriverapples.com. Established in 1852 by the Fenton family. A huge collection of over 140 varieties, many old and unusual.
- The Apple Farm, Fairfield, Somerset County (207) 453-7656. A great collection of unusual old and new varieties.
- Cayford Orchards, Skowhegan, Somerset County (207) 474-5200. 57 new and heirloom varieties of tree fruit on a sixth-generation family farm.
- Sewall's Orchard, Lincolnville, Waldo County (207) 763-3956, www.sewallsorchard.com. Organic apples including some of the first disease-resistant releases.
- Dole's Orchard, Limington, York County (207) 793-4409, www.dolesorchard.com. Mix of old and new. They have two un-named varieties crossed by the late Maine plant breeder Russell Bailey. Both are extremely rare, if not unique.

Other States:

I know a few orchards with good collections outside of Maine. If you know of any we should list, please let us know. An online search could direct you to an orchard nearby.

- Nashoba Valley Winery, Bolton, MA. (978) 779-5521, www.nashobawinery.com. A very large collection of old and new varieties.
- Tower Hill Botanic Garden, Boylston, MA (508) 869-6111, www.towerhillbg.org. The best collection of historic varieties in New England. At last count 119, all labeled in an arboretum-type setting. A great place to study the fruit. Usually for sale at a special event over Columbus Day weekend. Call ahead.
- Hutchins Farm, Concord, MA (978) 369-2480. Nice collection of old and mostly newer varieties.
- Old Sturbridge Village, Sturbridge, MA (508) 347-3362, www.osv.org. Apple days: October 1–2, 2011.
- Gould Hill Orchard, Contoocook, NH (603) 746-3811, gouldhill.com. Large collection of new and old varieties.
- Poverty Lane Orchards, Lebanon, NH (603) 448-1511, www.povertylaneorchards.com. Likely the best collection of unusual dessert apples in New England. One of the largest collection of cider apples in the U.S. They have most of the cider varieties we sell.
- Alyson's Orchard, Walpole, NH (603) 756-9090, alysonsorchard.com. Large collection of new and old varieties.

The Functional Orchard

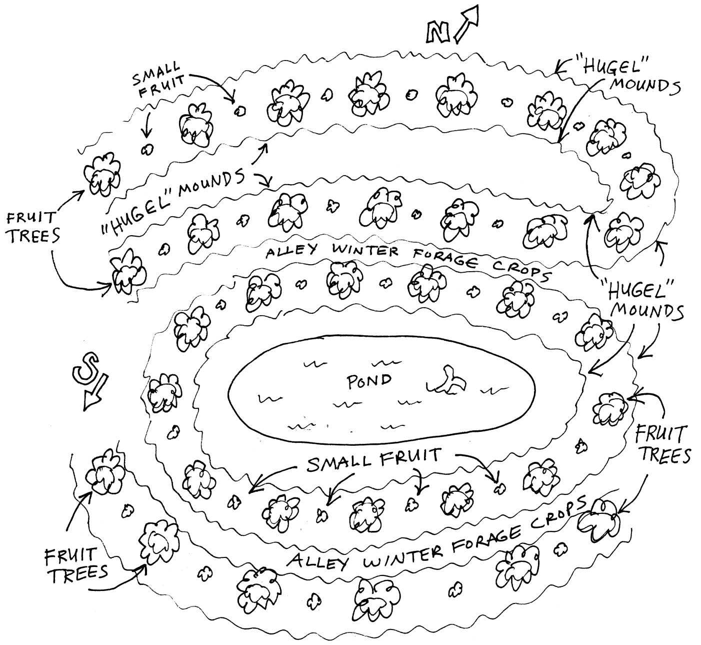
In 2010 we planted a new 200' x 200' (one acre) orchard of 40 apple trees on our farm. (Our original 100+ trees now range from 10–30 years old.) Our goal is to create a self-sustaining integrated system consisting of fruit trees, small fruits, dynamic accumulators, habitats for pollinators and other beneficials, companion plants, grains, and edible and medicinal woody and herbaceous perennials. We plan to show that good food can be grown with no spraying at all—organic or otherwise. Many people don't want to own a sprayer, or can't afford one. The model can also be used in conjunction with a spray program.

Form follows function. We call it the Functional Orchard for two reasons. Each plant has its own valuable attributes (functions) and all are selected to work together as an operative (functional) whole. This is not the monoculture of the modern orchard. Rather it is a polyculture of useful plants that all work together in an integrated system. We think of it as an orchard version of the "perpetual motion machine." We seek to minimize human intervention and external inputs once the system is set up.

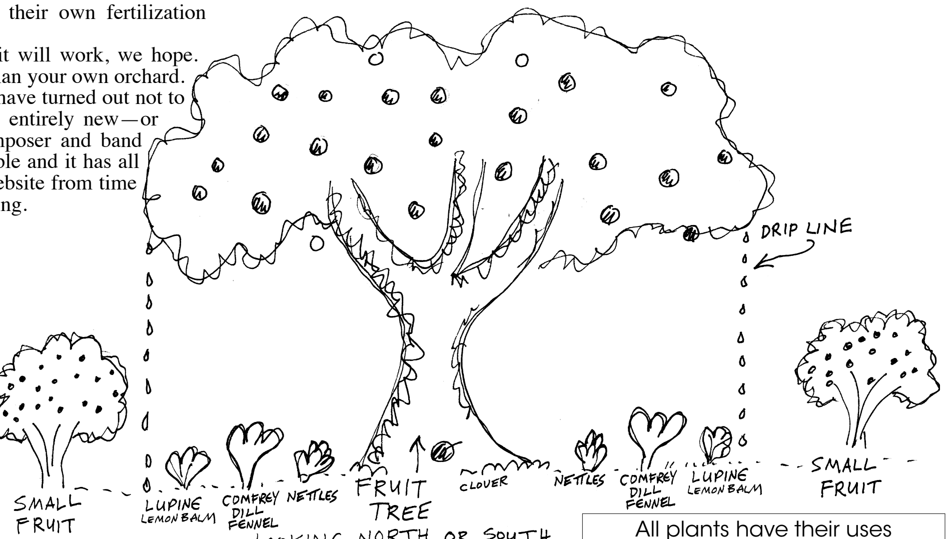
After the initial planting a year ago, we began to interplant the orchard with perennials and annuals in 2011. We have employed our own version of "Hügelkultur." We bury forest debris (rocks, branches, old logs etc.) in berms winding alongside the fruit trees, creating extended raised-bed terraces and water dams. By burying the brush, we can keep all the mineral and biomass in the orchard. Nothing is removed or bulldozed away. We also fertilize and—literally—build up the soil to feed future plant roots while avoiding the use of another gas-hog, the chipper. We will plant the berms with annuals and perennials beginning in 2012. That process will continue into 2013 and beyond.

In between the rows of trees are alleys. We will grow grains in these open spaces. We will also create strips of perennial and annual forage crops adjacent to the trees for movable chicken pens ("chicken tractors"). The goal here will be to grow grain in the alleys for the chickens to eat in winter while providing them with nutritious forage in spring, summer and fall. Meanwhile the chickens will return the favor with eggs and their own fertilization program.

This is obviously a work in progress. Some of it will work, we hope. Some will not. Perhaps this can inspire you as you plan your own orchard. Too bad the simplistic obvious solutions of the past have turned out not to be solutions at all. It's now time to try something entirely new—or maybe very old. To paraphrase the great jazz composer and band leader Sun Ra, "Now that we've tried what is possible and it has all failed, it's time to try the impossible." Check our website from time to time. We'll keep you posted on how things are going.


N
SMALL FRUIT
"HUGEL" MOUNDS
"HUGEL" MOUNDS
FRUIT TREES
ALLEY WINTER FORAGE CROPS
"HUGEL" MOUNDS
S
POND
FRUIT TREES
SMALL FRUIT
FRUIT TREES
ALLEY WINTER FORAGE CROPS

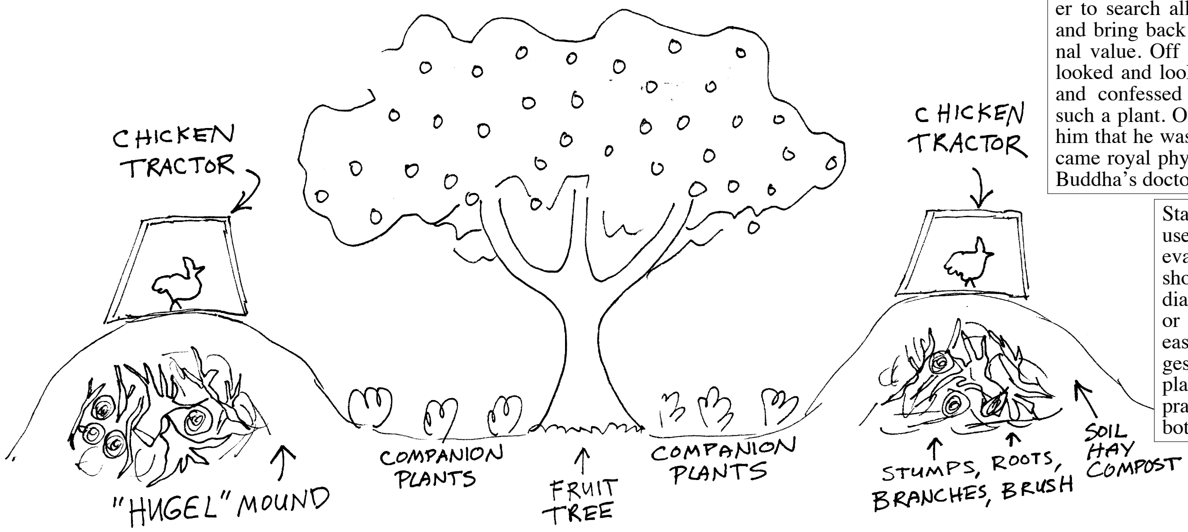
ORCHARD MAP


DRIP LINE
SMALL FRUIT
LUPINE
LEMON BALM
COMFREY
DILL
FENNEL
NETTLES
FRUIT TREE
CLOVER
NETTLES
COMFREY
DILL
FENNEL
LUPINE
LEMON BALM
SMALL FRUIT

LOOKING NORTH OR SOUTH

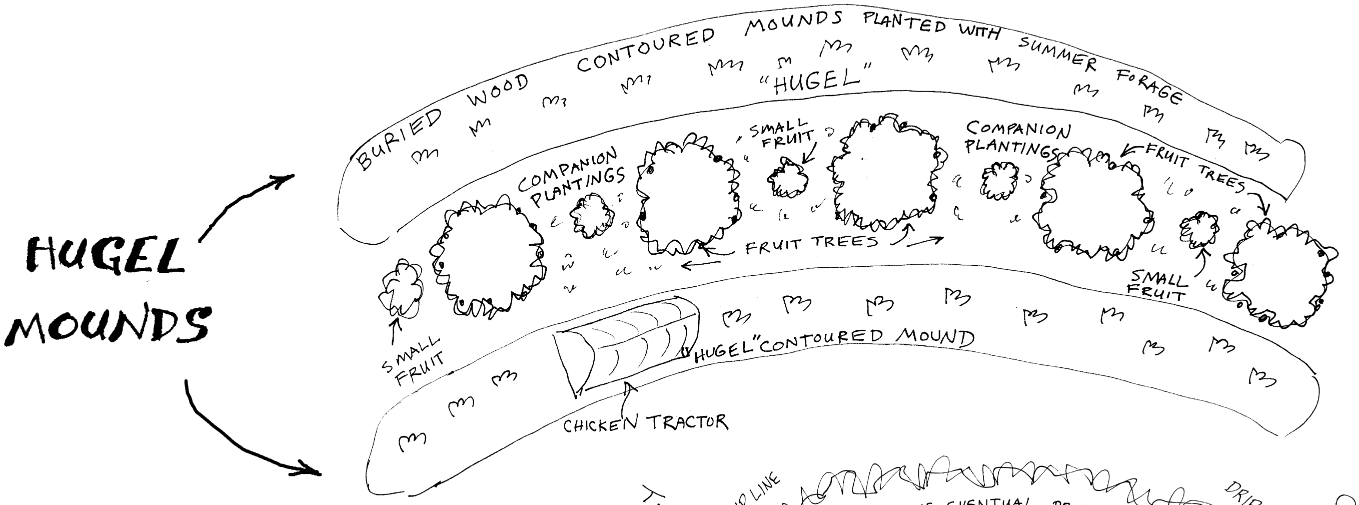
All plants have their uses
(a tale from ancient India)

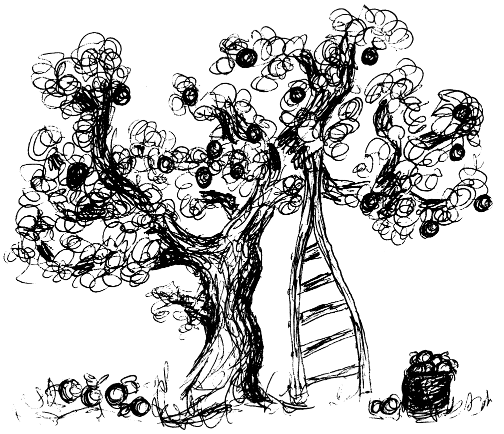
As an aspiring young medical student, Jivaka was instructed by his teacher to search all the plants in the forest and bring back one that had no medicinal value. Off he went. He looked and looked and looked. Finally he returned, and confessed that he could not find such a plant. Of course, his teacher told him that he was correct. Jivaka later became royal physician, and served as the Buddha's doctor.

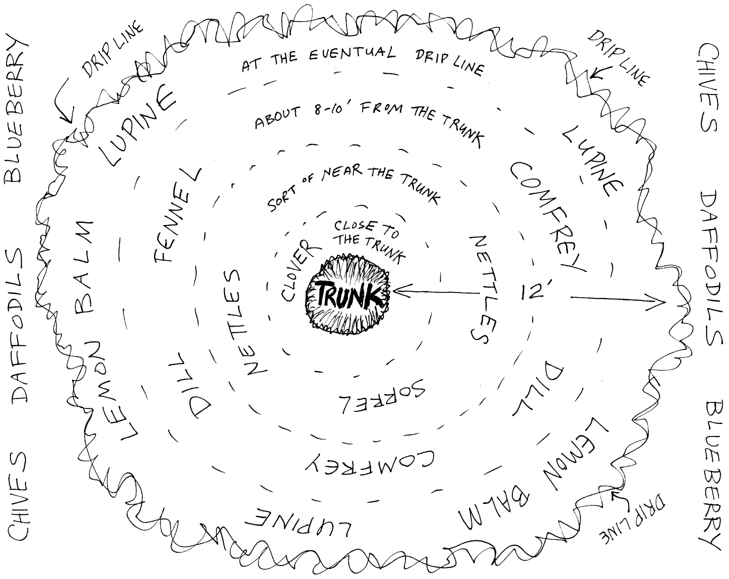

CHICKEN TRACTOR
"HUGEL" MOUND
COMPANION PLANTS
FRUIT TREE
COMPANION PLANTS
CHICKEN TRACTOR
STUMPS, ROOTS, BRANCHES, BRUSH
SOIL
HAY
COMPOST

LOOKING EAST OR WEST

Statements about medicinal uses of plants have not been evaluated by the FDA, and should not be used for the diagnosis, treatment, cure or prevention of any disease. Before using or ingesting any medicinal plant, consult a healthcare practitioner familiar with botanical medicine.


BURIED WOOD CONTOURED MOUNDS PLANTED WITH SUMMER FORAGE
"HUGEL"
HUGEL MOUNDS
COMPANION PLANTINGS
SMALL FRUIT
COMPANION PLANTINGS
FRUIT TREES
FRUIT TREES
FRUIT TREES
SMALL FRUIT
SMALL FRUIT
"HUGEL" CONTOURED MOUND
CHICKEN TRACTOR




DRIP LINE
DRIP LINE
DRIP LINE
AT THE EVENTUAL DRIP LINE
ABOUT 8-10' FROM THE TRUNK
SORT OF NEAR THE TRUNK
CLOSE TO THE TRUNK
TRUNK
12'
LUPINE
LUPINE
LUPINE
COMFREY
COMFREY
FENNEL
NETTLES
NETTLES
CLOVER
SORREL
DILL
DILL
LEMON BALM
LEMON BALM
LEMON BALM
BLUEBERRY
BLUEBERRY
DAFFODILS
DAFFODILS
DAFFODILS
CHIVES
CHIVES

A FEW COMPANIONS TO PLANT IN YOUR ORCHARD

(FOR A HUGE LIST, GO TO fedcoseeds.com)

Botanical Name	Common Name	Perennial Biennial Annual	Maine Native	Insectary	Medicinal	Edible	Dynamic Accumulator	Nitrogen Fixing	Hardiness	Bloom Time	Habitat Requirements
Achillea millefolium	Yarrow	P		Y	Y	Y			2	Jun-Aug	FS-PS, M, WD
Allium schoen.	Chive	P	Y		Y	Y			3	Jun	FS-PS, V/A
Arctium lappa	Burdock	SSB			Y	Y	Y		3	Jul-Sep	FS-PS, M, WD
Borago officinalis	Borage	SSA		Y		Y	Y		N/A	Jun-Sep	FS-PS, WD
Foeniculum vulgare	Fennel	P		Y	Y	Y			5	Aug - Oct	FS, WD
Lupinus perennis	Wild Lupine	P	Y	Y	Y			Y	4	Jun - July	FS, WD
Melissa officinalis	Lemon Balm	P		Y	Y	Y	Y		4	Jun-Oct	FS-PS, WD
Narcissus	Daffodil	P							4	Mar-Apr	M
Sambucus canadensis	Elderberry	P	Y	Y	Y	Y			4	Jul	FS-PS, M, WD
Symphytum officinale	Comfrey	P			Y	Y	Y		5	May-Jun	V/A
Trifolium repens	White Clover	P		Y				Y	4	Jun-Sep	FS, WD
Urtica dioica	Nettles	P	Y		Y	Y	Y		3	May-Oct	FS-PS, M
Vaccinium spp	Blueberry, Lingonberry	P	Y		Y	Y			2	May-Jun	Ac, M
Viola spp	Violets	P	Y		Y				2	Apr-May	M, WD

Perennial/Biennial/Annual: Some annuals/biennials may be self-seeding.
Insectary: Plants are good sources of pollen/nectar for bees and may also attract beneficial predatory insects/parasitoid wasps/flies.
Edible: Plants may be used for human consumption.
Dynamic Accumulator: Plants have deep taproots capable of bringing subsoil minerals to the surface and/or accumulate useful micronutrients in their tissues.
Nitrogen-Fixing: Plants harbor nitrogen-fixing bacterial nodules in their roots and may enrich the soil fertility.
Hardiness Zone: Indicates coldest climate zone plant is likely to overwinter through. Data not relevant for annuals.
Habitat Requirements: **FS**= Full Sun, **PS**=Partial Sun, **SH**=Shade, **Ac**=Acidic, **Dr**=Dry, **M**=Moist Soils, **R**=Rich Soils, **V/A**=Very Adaptable, **WD**=Well-drained Soils
N/A: Not Available, Not Applicable

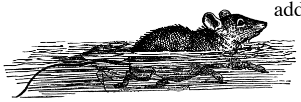
Cider Apples

Very shortly after Europeans arrived in New England they planted apple trees. Soon orchards were everywhere and so were cider presses. Every town had at least one and often several. Cider became America's drink. Those days came and then went. Until now. Cider is making a huge comeback. Despite government efforts being made to destroy the cider industry, cider is having a renaissance.

Each year we offer an assortment of European and American cider varieties. These are NOT for fresh eating. Nor are they suited for fresh cider. They do however possess the qualities that make them very desirable for fermented cider production, and fermented cider is what we mean by 'cider.'

We classify the cider varieties into four categories: **sharp** (low in tannins, high in acid), **sweet** (little or no tannin, low acid), **bittersharp** (high in tannins and high acid) and **bittersweet** (high tannins and sugar, low acid, astringent, said to make the highest quality cider). **Tannin** denotes naturally occurring compounds whose bitter astringency gives rounded full flavor, body, and golden color. **Vintage** refers to those varieties that possess the perfect qualities for cider.

Bittersweets don't contain enough acid to make quality single-variety ciders. Cider needs a sharp apple to provide some acid. Cidermakers blend the bittersweets with bittersharps or high-acid dessert apples. Among *the* most highly praised dessert apples with adequate acid levels for blending are Golden Russet, Esopus Spitzenburg, Roxbury Russet, Ashmead's Kernel, Wickson, Golden Delicious and Wealthy. Cidermakers also tend to use what they have at hand: many other dessert apples—or even wild seedling fruit—may have plenty of acid to use in blends.



"A rat in every vat" refers to the inadvertent but not entirely undesirable additional protein found in cider barrels generations ago (when the world was not so antiseptic). Here in town old timers told me of hanging a piece of beef in the barrel. In spring, only the supporting string would remain. According to cidermaker Cassie Tharinger, "The vitamin B complexes and proteins in the meat fed the yeast and made sure it didn't die out, especially over the winter down in the cool cellar. Cidermakers still add yeast nutrient to the juice to help the yeast stay active and well-fed as it ferments the sugars, they've just moved on to more refined forms of vitamin nutrition!"

A well-planned cider orchard includes several varieties of each season, ripening in a progression through the fall. (It does no good to have an early bittersweet if your other varieties don't ripen until late October.)

We recommend two books on cidermaking: *Cider Hard and Sweet* by Ben Watson and *Cider: Making, Using and Enjoying Sweet and Hard Cider* by Annie Proulx and Lew Nichols.

All cider apples are on standard (Antonovka) hardy seedling rootstock. (We provide trees between 3 and 6' tall.)

Ashton Bitter Early Fall. Full bittersweet. (Dabinett x Stoke Red) Long Ashton, England, 1947. Originally introduced by GT Spinks, Long Ashton's plant breeder. Resurrected from an old trial orchard and planted extensively in recent years. Medium-sized round opaque-orange-yellow fruit, blushed and striped with rich red. Very juicy and very astringent. A mix of half Ashtons and half a blend of Golden Russet, Nodhead, Stark and Golden Delicious produced a really nice clear amber dry tasty ever-so-slightly bitter cider in our 2005-6 trials. I was impressed. Ripens in early fall but we pressed in late October and the fruit was fine. Blooms midseason. Z4-6. **ME Grown**.

10076 Ashton Bitter, $24.00

For the ultimate cider experience join us at the 17th annual CiderDays festival in Franklin County, MA, on November 5–6, 2011. An old-fashioned weekend of workshops, panels, orchard tours, tastings, dinners and everything cider. If you are into apples and cider, it is just the thing for you.

This year will feature an apple-tasting battle of 6 southern apples selected by Virginia's Tom Burford and 6 northern varieties selected by Fedco's own John Bunker! The World Series of apples!

Dabinett Late Fall. Medium bittersweet. Probably a seedling of Chisel Jersey. Middle Lambrook, Somerset, England. Most popular cider variety in Somerset today and the mainstay of Poverty Lane Cider Orchards in Lebanon, NH. At a MOFGA workshop, Steve Wood of Poverty Lane and Farnum Hill Ciders told us, "If you're going to plant one bittersweet, plant this one." Medium-sized roundish fruit covered with sooty brownish brick-red stripes and blush. Looks rotten even when perfectly firm and ripe. Dense astringent juicy flesh. Sugar content fair and fermentation moderate. High quality well-balanced low-acid cider with a soft-tasting tannin. Pick last week of October, blend with other late varieties. Crops regularly. Grower-friendly tree with a spreading drooping habit, may require help in developing a strong central leader. Not pollen compatible with Chisel Jersey. Midseason bloomer. Z4-6. **ME Grown**.

10549 Dabinett, $24.00

Foxwhelp Fall. Bittersharp. Most sources say that the famous original 400-year-old Foxwhelp of yore has long disappeared from both sides of the Atlantic. No one seems to know the origin of this "new" Foxwhelp that some refer to as "Fauxwhelp." Some think it might be a renegade rootstock. There is disagreement about its worth in the cider barrel. While some consider it to be a valuable bittersharp, others say it should be relegated to the pie pan. (We tried it and it does make a very passable pie.) The distinctly ribbed large fruit is as big as a good-sized Cortland. Blocky-roundish shape with a chalky-greenish-yellow skin, light pink-red stripes and some blush. Very juicy and tart. Makes for surprisingly decent fresh eating. Blend it in the barrel with the fall bittersweets. Considered moderately vigorous and a good cropper. High specific gravity. Early-season bloomer. ZZ4-6. **ME Grown**.

10804 Foxwhelp, $24.00

Kingston Black Fall. Bittersharp. Unknown parentage. Somerset, England, early 19th c. High in tannin and acidity. Produces full-bodied vintage cider with a nice blend of acid, tannins and sugar. One of the few varieties which makes a high-quality *single variety* hard cider, also good in a blend. We've become fans of Farnum Hill's tasty Kingston Black varietal. Medium-sized conical beautiful rich red fruit, mottled with red russet and deeper shades of maroon (but not black!). Fairly decent fresh eating. The tree is a reliable bearer, but is gangly and needs careful pruning. Blooms midseason. Z4-6. **ME Grown**.

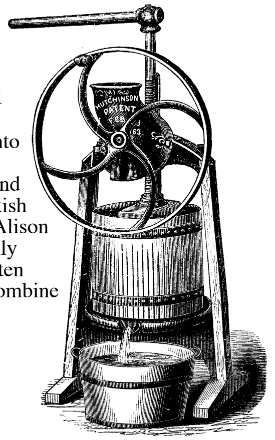
11403 Kingston Black, $24.00

Major Early Fall. Full bittersweet. Probably originated in central Somerset County, England, before 1900. Medium-sized somewhat attractive pinkish-red bulging-conic fruit with an obscure striped overlay. Skin has a weird sticky feeling when it's ripe. The flesh is soft, juicy and bitter. Recommended for combining with other early varieties. Vigorous tree with a good central leader and a spreading branching habit. I've heard varying reports from growers, both that it is precocious and slow to bear. Scab resistant. Midseason bloomer. Z4-6. **ME Grown**.

11555 Major, $24.00

Medaille d'Or (Gold Medal) Late Fall. Full bittersweet. Developed by a Mr. Goddard of Boisguillaume, Rouen, France. Introduced into England in 1884. Medium light yellow roundish fruit mostly covered with patches and netting of smooth tan russet. In the 1993 British text, *The Book of Apples*, Joan Morgan and Alison Richards write that it "produces sweet, heavily astringent juice and full bittersweet cider 'often high in alcohol, fruity and good quality.'" Combine with other late varieties. Z4-6. **ME Grown**.

11587 Medaille d'Or, $24.00



ME Grown = grown in Maine by a member of the Fedco growers coop.

Grafting Wax

These days most grafters use synthetic products in lieu of grafting wax. They tend to be easy to apply and fairly inexpensive. Some, however, want to use the real thing. Eric Johnsen brought some homemade grafting wax to the MOFGA Scion Exchange a few years ago. Here's his recipe:

2 cups beeswax
2 cups pine pitch
$1^{1}/_{2}$ cups raw linseed oil

Melt all ingredients in an old pot. Heat and stir with a stick or an old wooden spoon until all ingredients blend thoroughly. Then, pour into aluminum pie tins. Let cool and harden. To use, wet hands before handling wax to prevent sticking. Slice wax with a knife, shape with fingers, and mold onto grafting site.

Reine de Pomme Fall. Strong bittersweet. Possibly Normandy, France, before 1920. One of the late Terry Maloney's favorite cider apples. After hearing about the apple a couple of years ago from aspiring cider-maker Cassie Tharinger, I wrote to Terry requesting grafting wood. He generously provided us with wood and wrote to me, "I think the Reine de Pomme has the most powerful and unique taste in a cider of any of the apples we grow. It's a true spitter though. It does ok around here, with a tendency towards biennial bearing (although a neighbor planted some for us and seems to have a steady crop) and an upward growth habit." The Maloney West County Cider website says, "As a cider it has a deep, dark-fruit, honeyed taste. We blended it with our Dabinett to round out the tannins, and Redfield to add bright fruit and to balance the bitter-sweets. Though blended, Reine de Pomme leads the taste, and the Dabinet and Redfield fall in nicely as supports. It is the fullest-bodied cider we have made. Alcohol 5.7%." On trial here now in central Maine. Z4-7. **ME Grown**.

12100 Reine de Pomme, $24.00

Stoke Red Late Fall. Bittersharp. Also called **Neverblight**. May have orginated in Rodney Stoke or near Wedmore, Somerset, England. Medium-sized round-conic fruit covered with dark red radiating stripes that blend into a nearly solid glowing red and pink blush. Some russet dots and netting. Very attractive. Sharp juice with some astringency. Very sharp cider. Consistent heavy cropper and a reputation in the U.K. for resistance to pests and disease. (That's over there, mind you.) Pick late in the fall and combine with other late varieties. Booms late-season. Z4-6. **ME Grown**.

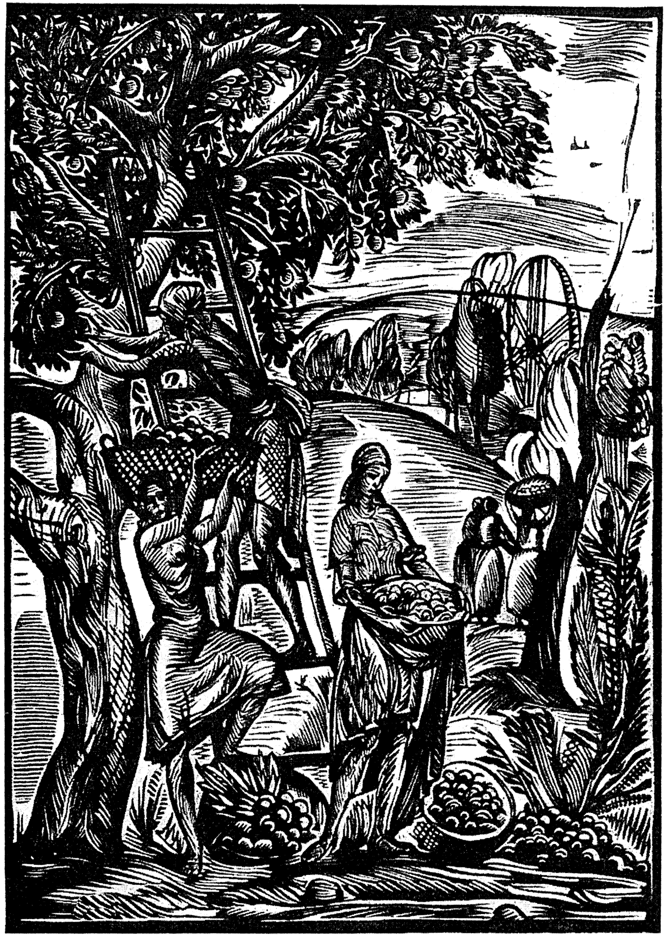
12353 Stoke Red, $24.00

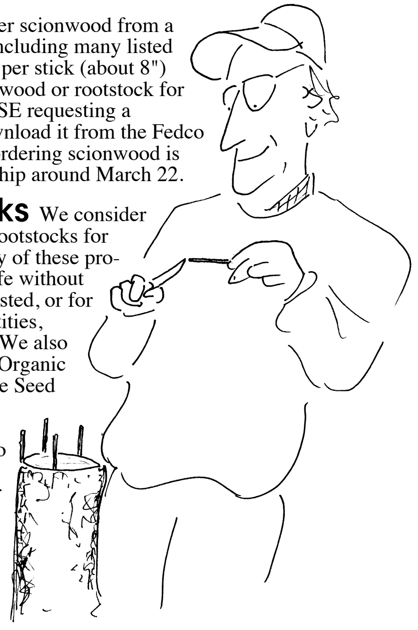
Yarlington Mill Fall. Medium bittersweet. Yarlington, near North Cadbury, Somerset, England, 1898. Once common in farm orchards of central Somerset. Steve Wood's other favorite bittersweet. Medium-sized yellow conical fruit with a pinkish blush and over-spreading darker red stripes. Considered an all-round excellent variety: reliable, productive and adaptable to varying conditions. Rich brown low-acid mild lovely aromatic fruity cider, not aggressively tannic. Above-average sugar content. Slow to medium fermentation. Somewhat gangly tree with a lot of blind (non-productive) wood. You may need to head back the leader in early years to encourage strong laterals. Midseason bloomer. Z4-6. **ME Grown**.

12744 Yarlington Mill, $24.00

Cider Apple Collection A package of 7 trees to begin your cider orchard. Our choice of 2–4 sharps or bittersharps and 3–5 bittersweets for each collection. The individually labeled trees will include at least 6 different varieties, perhaps including some not listed here. **ME Grown**. (3'-6')

02799 Cider Apple Collection, bundle of 7, $140.00





Scionwood We offer scionwood from a wide selection of fruit trees including many listed in this catalog. Price is $3.00 per stick (about 8") plus shipping. To order scionwood or rootstock for early shipment, send us a SASE requesting a scionwood order form or download it from the Fedco Trees website. Deadline for ordering scionwood is February 24, 2012. We will ship around March 22.

Hardy Rootstocks We consider these to be some of the best rootstocks for home or commercial use. Any of these produces fruit suitable for wildlife without grafting. For rootstocks not listed, or for larger calipers or larger quantities, please write for information. We also offer grafting supplies in the Organic Growers Supply section of the Seed catalog or online at **www.fedcoseeds.com**.

You may order rootstock to be shipped around March 22 by using the scionwood order form, obtained by requesting it with a SASE or downloading it from our website. Rootstock ordered online or on the regular order form in this catalog will be shipped with the rest of the Tree order in April.

Please join us Sunday, March 25, 2012, at the Maine Tree Crop Alliance annual Scionwood Exchange and grafting workshop in the exhibition hall of MOFGA's Common Ground Education Center in Unity. MOFGA also offers a full range of organic orcharding classes; see the MOFGA website (www.mofga.org) for details.

***Malus* 'Antonovka'** (Apple) Hardy Russian seedling rootstock for standard-sized apple trees. Z3-5. (1/4" caliper)

02801 Malus Antonovka , bundle of 10, $22.00

***Malus* 'Budagovsky 9'** (Apple) [M.8 x Red Standard (Krasnij Standart)] Also called Red-leafed Paradise or **Bud 9**. Michurinsk College of Agriculture, Michurin, Russia, 1946. Dwarfing rootstock, produces a tree about a quarter the size of a standard tree. Highly productive and precocious with high levels of soluble solids and large fruit size. Very hardy though not as hardy as Antonovka. In most locations, requires weeding, mulching, staking and irrigation. Space trees 7–8' apart in rows 14–15' apart. Some resistance to fireblight. Z4. (1/4" caliper)

02809 Malus Budagovsky 9, bundle of 10, $24.00

***Malus* 'Budagovsky 118'** (Apple) Moscow Pear x (M8 and M9 pollen) Michurinsk College of Ag, Michurin, Russia. Also called **Bud 118** or **B118**. Semi-dwarf rootstock, similar in size to M111 (about 85–90% of standard). Sometimes referred to as a "semi-standard" or even a standard. More productive than Antonovka, similiar to M111 in that respect. Not considered precocious though it may fruit sooner than trees on Antonovka. Very winter hardy and soil adaptable. Generally not used in commercial orchards due to its large size. Resistant to collar rot. Unknown susceptibility to fire blight. Z3. (1/4" caliper)

02811 Malus Budagovsky 118, bundle of 10, $24.00

***Malus* 'Geneva 11'** (Apple) Also called **G11**. Cornell University introduction, NY. Dwarf rootstock produces a tree about a third the size of standard—about halfway between M9 and M26. Suckers only slightly, moderately susceptible to wooly apple aphid. Excellent fire blight resistance. Requires staking, weeding and watering in most locations. Z4? (1/4" caliper)

02821 Malus Geneva 11 Dwarf, bundle of 10, $30.00

Prunus americana (Plum) Seedling rootstock for American, Japanese or hybrid plums. Also recommended for grafting peaches. Seedling plum produces very decent 1" fruit without grafting. The best pollinator for hybrid plums. (See explanation in plum section on page 24.) Z3-5. (1/4" caliper)

02832 Prunus americana, bundle of 10, $22.00

***Prunus cerasifera* 'Myrobalan'** (Plum) Seedling rootstock for European plums. Not recommended for American or hybrid plums. (1/4" caliper)

02840 Prunus cerasifera Myrobalan, bundle of 10, $22.00

***Prunus avium* 'Mazzard'** (Cherry) The rootstock we use for grafting sweet and pie cherries. Shallow spreading root system. Longer lived than Maheleb though not as hardy. Does not do well in heavy poorly drained soils. Z4/5. (1/4" caliper)

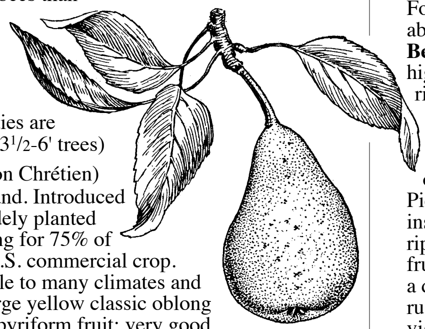
02837 Prunus avium Mazzard, bundle of 10, $22.00

***Pyrus* 'Old Home Farmingdale 97'** (Pear) (Old Home x Farmingdale) Produces a vigorous hardy well-rooted almost standard-sized tree. Superior to *Pyrus communis* in numerous ways. We are switching over to "97s" at Fedco. Z3/4. (1/4" caliper)

02853 Pyrus Old Home Farmingdale 97, bundle of 10, $30.00

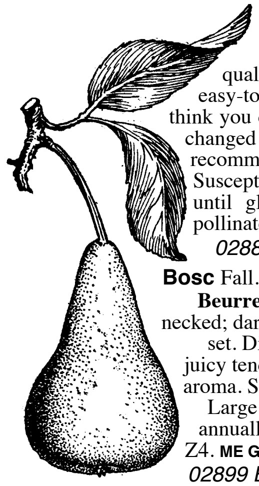
Pears *Pyrus communis* are native to temperate Europe and Asia and can grow up to 100' tall in the wild. Many pear varieties are hardy in New England, but tend to take longer to come into bearing than apples. Further south, pears tend to bear annually. However in Maine, where they are approaching their northern limit and due perhaps to our harsher climate, some varieties tend to bear biennially. Pick fruit when green and ripen it on the shelf. Or, for optimal eating, try Ed Fackler's method: "…when fruits exhibit slight color changes, begin to test pressure (using your thumb) near the stem. When there is a slight 'give,' pick all the fruit, store at or near 35° for 7 or more days. Then remove them as needed, allow them to sit at room temps for 2–4 days which allows them to ripen to peak flavor."

Pear blossoms are less attractive to bees than apple blossoms, so pears should be planted closer together to ensure pollination. Although some pears appear to be self-pollinating, **we recommend a second variety for pollination**. Bloom dates for all varieties are similar. Plant pear trees 15-20' apart. (3½-6' trees)



Bartlett Late Summer. (Williams' Bon Chrétien) Seedling found in Aldermaston, England. Introduced to the U.S. in the late 1700s. Most widely planted and well known of all pears, accounting for 75% of the U.S. commercial crop. Adaptable to many climates and soils. Large yellow classic oblong obtuse-pyriform fruit; very good quality. Full reliable annual crops. Large vigorous easy-to-grow long-lived tree bears young. I used to think you couldn't grow Bartlett in central Maine, but I've changed my mind over the past few years. Now I recommend it as a good choice south of Bangor. Susceptible to fire blight, though that won't be up here until global warming catches up with us. Will not pollinate Seckel. Z4. **ME Grown**.

02887 Bartlett, $24.00

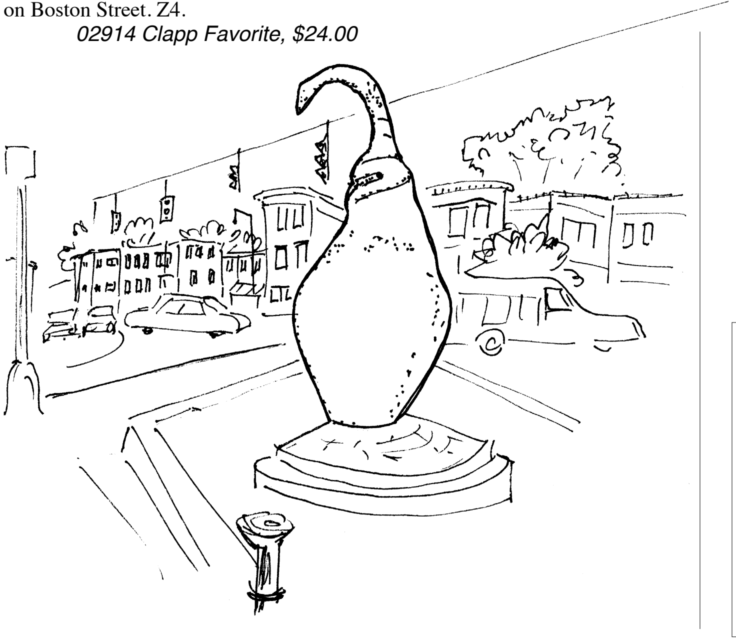


Bosc Fall. Seedling in Lourain, Belgium, 1807. Also called **Beurre Bosc**. Oblong acute pyriform, or large and long-necked; dark rich yellow covered with cinnamon-brown russet. Distinctive sweet rich spicy buttery flavor. Melting juicy tender white flesh has smooth texture and a pleasing aroma. Somewhat gritty around the core. Good pollinator. Large vigorous upright spreading tree bears huge crops annually. A longtime favorite throughout central Maine. Z4. **ME Grown**.

02899 Bosc, $24.00

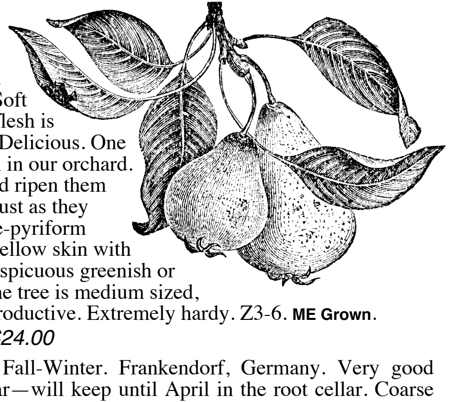
Clapp Favorite Mid-Late Summer. Thought to be Bartlett x Flemish Beauty. William Clapp introduction, Dorchester, MA, 1840. Hardy pear common in Maine for well over 100 years. Very juicy melting sweet fruit with that absolutely perfect "pear flavor" for fresh eating. Medium-large fruit is pale lemon yellow, mottled bright red. Round-bodied with a short neck. Obovate ovate slightly obtuse pyriform! Medium-firm fine-textured with granular center. Pick before completely ripe and finish indoors (tendency to soften at the center after ripening). Makes a great pear wine. A fabulous 11' tall bronze statue of the pear stands next to a KFC in Dorchester's Edward Everett Square, just a quarter mile from the Clapp farm on Boston Street. Z4.

02914 Clapp Favorite, $24.00



Comptesse Clara Frijs Late Summer. Denmark, 19th c. Very old delectable dessert pear, first described in 1858 by JA Bentzien in the Danish garden journal *Dansk Haugetidende* and thought to be from the village of Skensved. High-quality dessert pear. Medium-sized yellowy-green oblong obovate pyriform rather thick-skinned fruit sometimes with a very slight pink blush—more like a spot of rouge. The buttery aromatic flesh is firm but not crisp with no grit cells. Juicy but not dripping. You can eat it in the car. You can eat it right down to nothing. Keeps for a month. Solid rugged hardy tree. Z4. **ME Grown**.

02920 Comptesse Clara Frijs, $24.00



Giffard Summer. Chance seedling discovered by Nicolas Giffard, Foussieres, France, 1825. Introduced to the U.S. about 1850. Also called **Beurre Giffard**. Very high-quality dessert pear ripens in midsummer just before Clapp Favorite. Soft melting slightly coarse flesh is very similar to Bartlett. Delicious. One of the first pears to ripen in our orchard. Pick them a little green and ripen them inside or pick them daily just as they ripen. Medium-sized acute-pyriform fruit has tender greenish-yellow skin with a dotted red blush and conspicuous greenish or russet dots. Small core. The tree is medium sized, vigorous, spreading and productive. Extremely hardy. Z3-6. **ME Grown**.

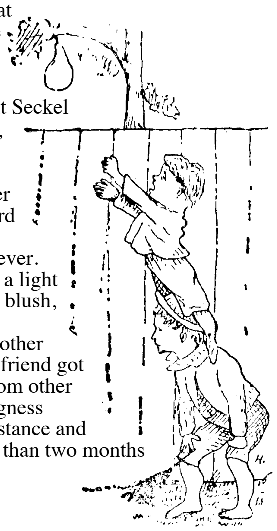
02941 Giffard, $24.00

Kaspar's Winter Late Fall-Winter. Frankendorf, Germany. Very good tough-skinned storage pear—will keep until April in the root cellar. Coarse flesh with a good flavor. Very hard off the tree; don't eat it until a month after picking. Greenish-mottled medium-small pyriform fruit with some russet splashes or dots. Years ago this nameless winter pear found its way from the roadside near Frankendorf to Unity, ME. The name came later, courtesy of grower Howard Wulf who calls it "the latest-keeping pear I've ever seen." Sturdy adaptable hardy precocious tree. We last offered Kaspar two years ago and ran out of trees way too early. This year we have an excellent supply. Z4. **ME Grown**.

02967 Kaspar's Winter, $24.00

Luscious Early Fall. (SD E31 x Ewart) SD State U, 1967. One of the few recent pear introductions that deserves a place in the home orchard. Produces annual crops of delicious medium-sized oblong obovate pyriform fruit. Bears so heavily that it's apt to break branches. The soft fine extra-juicy off-white flesh is sweet and flavorful with almost no grit cells. Thin yellowish skin is covered with small tan dots. Anecdotal evidence suggests that it may crop best when grown near Bartlett or one of the Asian pears. Although some literature warns that Luscious itself is a poor pollinator, we've been happy to have it at our place. Z3.

02973 Luscious, $24.00



Magness Late Summer. US 3866-E [Giant Seckel (SP149490) x Doyenne du Comice] USDA, 1960. Rich, melting, buttery, juicy, sugary, tender, highly perfumed and aromatic with almost no grit cells. Renowned plant breeder Elwyn Meader rated Magness as *the* standard by which to judge other pears in taste and quality. Some call it the best-flavored pear ever. Medium-sized fruit is greenish-yellow with a light dull-bronze russeting, sometimes a crimson blush, and a short pyriform—almost oval—shape. Vigorous spreading tree. Will not pollinate other varieties. Fruit set can be inconsistent. One friend got excellent fruit set by mashing up flowers from other pear varieties and spraying them on his Magness when it was in full bloom. Some insect resistance and excellent fire blight resistance. Keeps more than two months with refrigeration. Z4.

02976 Magness, $24.00

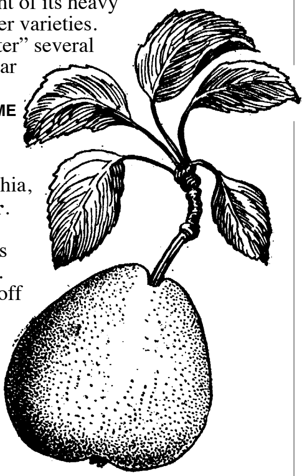
Making pear sauce and applesauce in the oven

Tom Vigue learned from an old-timer how to make syrupy fruit sauces and butters by roasting the fruit. We love this recipe. It requires no sugar, spices, cream or ice cream.

Fill a large (or huge) roasting pan with whole pears or apples with only the stems removed, as long as the fruit is of nice quality and doesn't need more trimming. Roast at approximately 350° for a couple of hours, checking occasionally to mash down any fruit before it scorches. After two hours or more, when fruit is soft, process through a food mill to remove skins and cores. At that point you will have a sauce. Return sauce to the oven and roast for a few more hours, depending on how concentrated you want it. A very concentrated sweet fruit butter eventually results without ever burning the bottom of the pan. Serve "as is" for dessert.

Patten Late Summer. (Orel 15 x Anjou) CG Patten introduction, Iowa St U, 1922. The best-quality large hardy pear available. Very good fresh eating with sweet "high flavor." Fine-grained soft flesh has minimal grit cells. Vaguely reminiscent of Bosc in size and shape. Good canning pear. Tree is extremely adaptable, growing all over the Northeast. Long willowy branches very flexible, won't break even under the weight of its heavy crops. Scab resistant. A good pollinator for other varieties. Fared incredibly well during the cold "test winter" several years ago when hundreds of northern Maine pear trees died to the roots. Extremely hardy and highly recommended for coldest districts. Z3. **ME Grown**.

03003 Patten, $24.00



Seckel Late Summer. Seedling near Philadelphia, PA, early 1800s. Sometimes called **Sugar Pear**. Often considered the best-flavored of all pears; even the skin is delicious. Small obovate fruit is yellowish-brown russeted with slight red blush. Juicy, spicy, distinctive and aromatic. Eat ripe off the tree or pick firm and ripen later. We use Seckels to make our baked "applesauce." It's wonderful. Very productive annual-bearing large tree, easy to grow. *The* most reliably bearing fruit tree we have. Scab and fireblight resistant. Will not pollinate Bartlett. Z4. **ME Grown**.

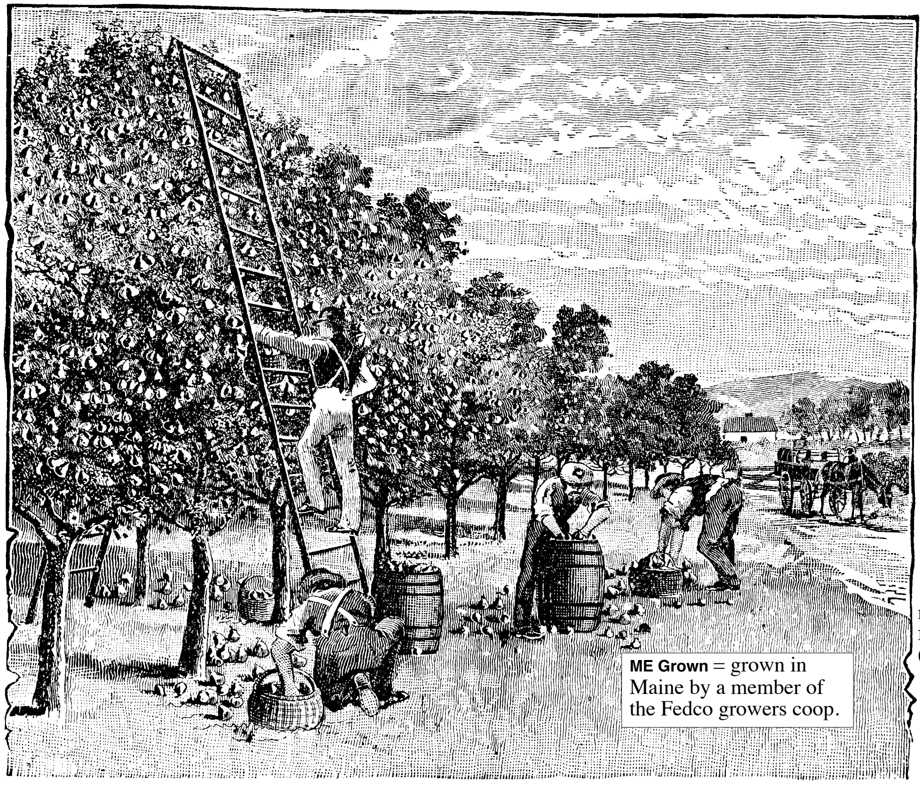
03021 Seckel, $24.00

Stacyville Late Summer. Unknown origin. Stacyville, ME. Medium-sized obovate obtuse-pyriform pears are light yellow with a beautiful orange to greyish-red blush. The sweet fruit has a delicious citrusy aftertaste. Our tree began producing only a few years after planting. Now at age 18, it produces large crops of fruit annually. Many years ago friends told me about the pear and insisted that I make the trip to Stacyville in southern Aroostook County. When I finally saw it myself, I thought that the 50' tall vase-shaped tree was an elm. That tree, held together with cables, was extremely old but still bearing huge crops. Appears to be self-pollinating. Disease resistant, extremely hardy, annual-bearing and very vigorous. Does not keep for long; use them up quickly! Rare. Z3. **ME Grown**.

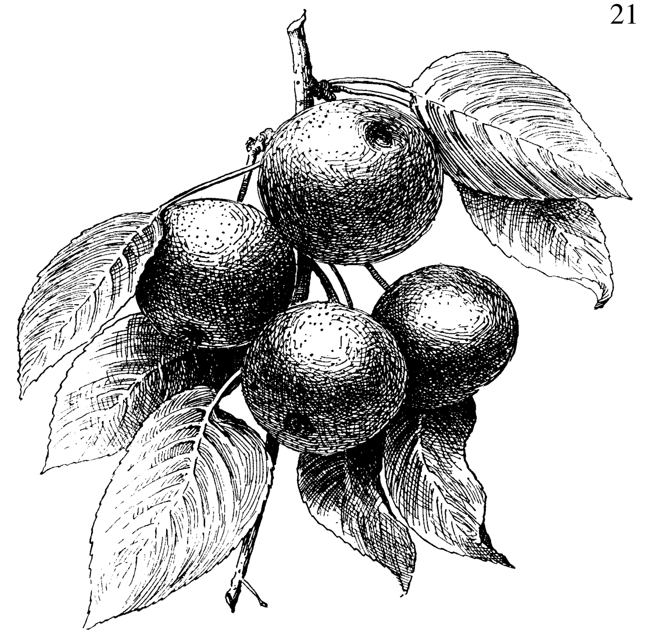
03036 Stacyville, $24.00

Summercrisp Midsummer. MN N33201 (Gaspard No. 5), unknown parentage. U Minn, 1986. Brought to the Minnesota Horticultural Research Station by John Gaspard in 1933. Large obovate acute-pyriform very sweet dessert and canning pear with green skin and a red blush. Ripens in August in Maine. Eat them fresh crisp, can them in quarters, and juice the rest. Precocious, annually bearing tree, medium-sized with typically conic habit. Considered the hardiest variety in the Minnesota collection. Free from fireblight. Z3.

03039 Summercrisp, $24.00



ME Grown = grown in Maine by a member of the Fedco growers coop.



Asian Pears *Pyrus pyrifolia* have been grown in China, where there are thousands of named cultivars, for over 2000 years. Very long-lived and bearing young, they often produce extremely heavily at maturity. Asian pears differ from European pears in texture, taste and appearance: they are crisp and very juicy, sweet and mild with a nutty background, and are roundish in shape. **Although partly self-fruitful, pollinators are recommended.** The varieties we offer will pollinate one another. Some European pears, notably Bartlett, will also act as pollinators as long as bloom times overlap. Because they set so heavily, to ensure large fruit size, thin the crop once or even twice during the first two months after bloom. Unlike European pears, they should be tree-ripened. When the seeds are black, the pears are ready to pick. They ripen in late summer and keep several weeks under refrigeration. Cultural requirements are similar to European pears. Although there have been occasional reports of Asian pears growing in Zone 4, they should be considered a Zone 5 plant. (3$^{1}/_{2}$-6' trees)

Hosui Late Summer. [Ri-14 (Kikusui x Yakumo) x Yakumo] National Hort. Res. Stn. Tsukuba, Japan, 1972. Standard commercial variety. Large round-oblate long-stemmed fruit with medium-thick skin covered with glowing yellow-orange-golden brown russet and numerous light russet dots. Firm crisp fine-textured juicy mild subacid yet sweet rich-flavored white to off-white flesh is considered by some to be the best flavored of all Asian pears. Will store for a month. *Hosui* literally means 'much water.' Medium-sized very vigorous spreading productive tree has a floppy loose almost weeping growth habit. Pollinated by other Asian pears or Bartlett. Susceptible to fire blight. Z5.

03104 Hosui, $24.00

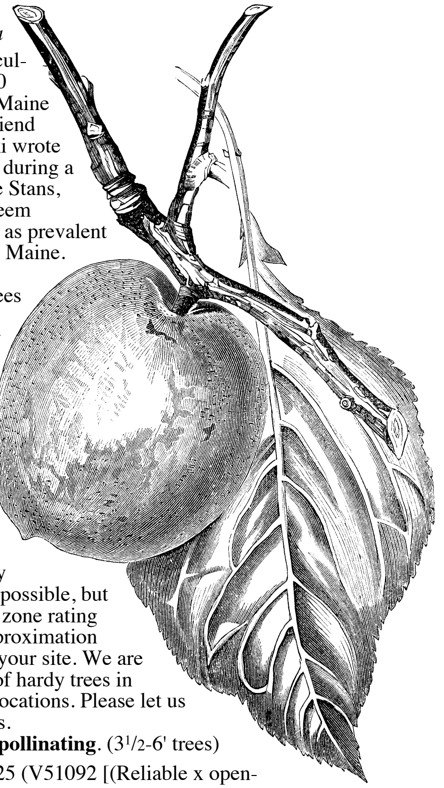
Niitaka Late Summer. (Amanogawa x Imamuraaki) Japan, 1915. Large roundish orange-brown russeted fruit with sweet crisp juicy flesh. Described by "The Fruit Guys" as having "so much juice that when you eat them you will need a napkin nearby. The Niitaka pear is candy-sweet with aromatic flavors of caramel and butterscotch." Great for fresh eating and canning. Medium to low vigor, very upright, highly productive tree. Some say the flowers are pollen-sterile, other sources disagree, but Niitaka sets fruit well when cross-pollinated with other varieties or Bartlett. Ripens after Hosui. Stores two months. Susceptible to fire blight. Z5.

03110 Niitaka, $24.00

Shinsui Summer. (Kikusi x Kimizukawase) Hort Research Stn, Yatabe, Japan, 1967. Medium-sized round-oblate yellowish-brown russetted fruit with crisp juicy fine-textured very sweet flesh. Excellent fresh eating. Not as firm as other Asians. One of the earliest to ripen each year. Pennsylvania grower and Asian pear aficionado Ike Kirschner considers this a great pear. Keeps about 6 weeks in refrigeration. Pollinated by other Asian pears or Bartlett. *Shinsui* is translated as 'new water,' 'adoration,' 'inundation' and more. It is also the pseudonym of one of Japan's most famous twentieth-century artists, Ito Shinsui (1888-1972). Even if you don't know his name, you will almost certainly recognize his iconic colorful prints of young women. Z5/6.

03127 Shinsui, $24.00

Stone Fruits *Prunus* spp. are widely cultivated around the world and adaptable to most of New England. Not highly particular as to soils. **Clingstone** means the fruit's flesh clings to the pit (or stone) and a **freestone** pit drops away from the flesh.



Apricots *P. armeniaca*

are native to central Asia, cultivated there for about 4000 years. Downeast (coastal) Maine apricot grower and good friend Richard "Ozzie" Ossolinski wrote recently, "from what I saw during a recent road trip through the Stans, apricot 'orchards' hardly seem necessary.…Wild trees are as prevalent there as spruces are here in Maine. Even in the most rugged mountain terrain apricot trees seem to have established themselves wherever a few teaspoons of soil exist near a trickle of water: really pretty amazing." The trees are only marginally adaptable to northern New England. Because their early blossoms are sensitive to cold spring weather, they are often planted with northern exposures to delay blooming. Large crops are possible, but uncommon, in Maine. The zone rating should be viewed as an approximation because much depends on your site. We are on the lookout for reports of hardy trees in Maine and other northern locations. Please let us know if you've had success.

Plant 15–20' apart. **Self-pollinating.** (3$^{1}/_{2}$-6' trees)

Harglow Summer. HW 425 (V51092 [(Reliable x open-pollinated) x o.p.] x Sun Glo) Ag Canada introduction, Harrow Research Center, Harrow, Ontario, 1982. Medium-sized bright orange fruit, sometimes with a small blush. Freestone. Recommended for fresh use and home-processing. Productive tree. Resistant to bacterial spot, brown rot and perennial canker. One of 13 apricot varieties (others include Harcot, Hargrand, Harlayne and Harogem) introduced by Richard E.C. Layne, director of Ag Canada's breeding program in Harrow from 1963-1996. Late blooming. Self-pollinating. Probably Z5.

03162 Harglow, $24.00

Pioneer Chinese Summer. Golden-yellow fruit with a reddish blush. Sweet firm and juicy flesh with the added benefit of an edible pit. Probably freestone. Self-fertile although yields improve with cross pollination. Late blooming could be an asset or a "pit-fall" depending on the latest bizarre spring weather pattern. Z4.

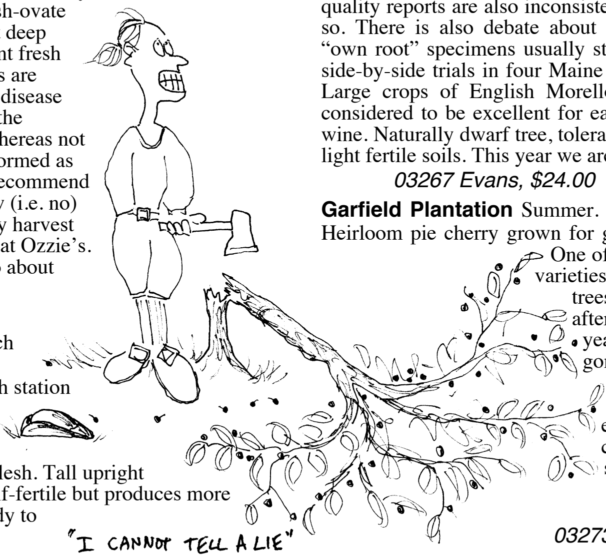
03187 Pioneer Chinese, $24.00

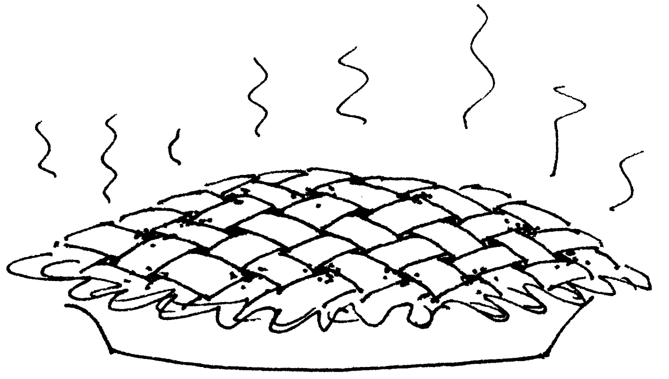
Puget Gold Summer. Originally called Cougar Gold. Chance seedling (possibly of Perfection). Discovered in Anacortes, WA, by Jean Copeland. U of Wash. intro, 1987. Roundish-ovate clear yellow red-blushed fruit. Dense firm sweet deep orange-yellow freestone flesh is good to excellent fresh eating, drying or canning. Prolific. The blossoms are more frost-tolerant than those of many apricots; disease resistance is above average. Offered again with the encouragement of grower Ozzie Ossolinski: "Whereas not every PG that I have planted for clients has performed as well as those in my own orchard, I continue to recommend (and plant) it for those who are looking for a low (i.e. no) maintenance tree from which they might actually harvest some decent fruit." Ripens about September 1st at Ozzie's. Moderately vigorous spreading tree will grow to about 15x15'. Z5.

03189 Puget Gold, $24.00

Scout Summer. PI 132840. Canada Ag Research Stn introduction, Morden, Manitoba, 1937. Originated from seed sent in 1930 to the research station from Echo, Manchuria. Mild flavor. Fair for eating and very good for canning. Medium to large dull-orange pointed fruit blushed with red. Freestone with moderately juicy tender orange flesh. Tall upright rounded somewhat vigorous productive tree. Self-fertile but produces more fruit with another variety nearby. Said to be hardy to Z3, but don't hold your breath. Z4/5.

03191 Scout, $24.00


"I CANNOT TELL A LIE"



Sweet Cherries *P. avium* are generally not hardy in Maine. Most grow into very large trees. We are currently testing some of the hardiest varieties and hope to have more of them available in upcoming years. (3$^{1}/_{2}$-6' trees)

Stella Midsummer. 2C-27-19 (Lambert x John Innes Sdlg. 2420) Canadian Dept of Ag Research Stn, Summerland, BC, 1968. The first hardy good-quality self-fertile sweet cherry. Large heart-shaped black-skinned fruit has juicy medium-firm black flesh. May be a disappointment to sweet cherry aficionados from the Northwest but could be like a dream come true for orchardists living in the North. Although the fruit buds are relatively tender, we've received encouraging reports that the tree is doing well in Minnesota. Upright spreading vigorous productive tree will grow to 25–30'. Self-pollinating, also pollinates other sweet cherries. Z4.

03247 Stella, $24.00

Pie Cherries *P. cerasus* are called "sour," but they're delicious enough to eat right off the tree. They fruit in early to midsummer and don't mind heavy soil. They are especially good in pies. They are generally divided into two groups: **Morello types** have dark red spherical fruit, dark juice and relatively small compact trees. **Montmorency** (or Amarelle) **types** have light red slightly flattened fruit, clear juice and medium-sized somewhat open trees.

Pie cherries are significantly hardier than sweet cherries but can be frustrating to grow. Although the trees are fully hardy in Zone 3, flower buds may be damaged in colder winters. Some growers in Maine have reported large harvests only to have their trees die unexpectedly a year or two later. We regularly hear reports of excellent crops so we know it can be done. We are currently testing several promising varieties including some local heirloom discoveries. Our hope is to find pie cherries that will be consistently healthy and productive. We are very interested in your successes and failures. If you have had experiences you think might be useful to others, please be in touch. **Pie cherries are self-pollinating, and do not require another variety for pollination**. Plant 15-20' apart. (3$^{1}/_{2}$-6' trees)

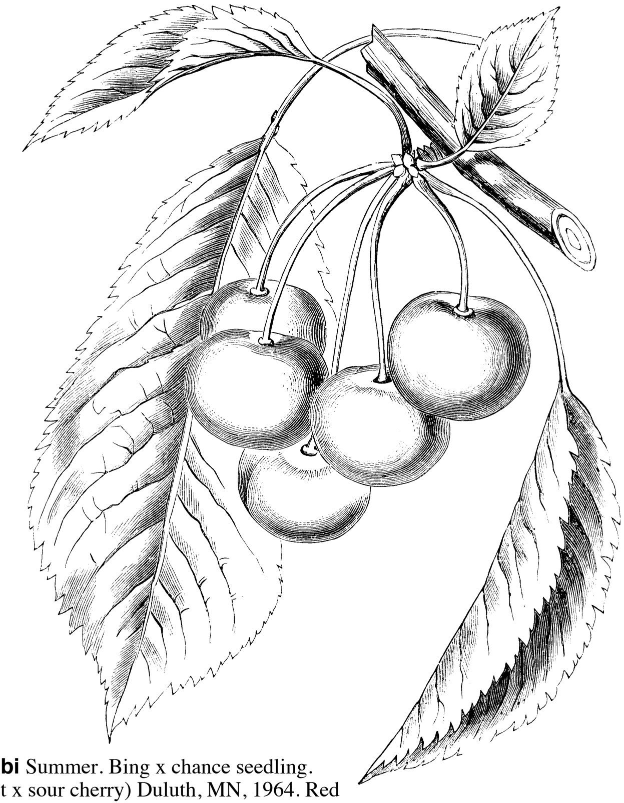
For Carmine Jewel and Crimson Passion dwarf sour cherries, see p. 40.

Evans Mid-Late Summer. Unknown parentage. Edmonton, Alberta, Canada. Also called Bali. Rescued from obscurity in 1976 by Dr. Ieuan Evans for whom it was named. Thought to have been brought to Alberta by early settlers from Minnesota. Known in the Edmonton area at least back to 1923 but only recently gaining widespread attention. Hardiness reports are inconsistent, but our own Aroostook County trials are proving it to be hardier than Meteor, Montmorency and North Star. Cropping and fruit-quality reports are also inconsistent. Some extremely positive and others not so. There is also debate about the differences between grafted trees and "own root" specimens usually started by tissue culture. We are now doing side-by-side trials in four Maine locations to see if we can sort that all out. Large crops of English Morello-type fruit are possible and the fruit is considered to be excellent for eating, jams, jellies, pies, dark red juice and wine. Naturally dwarf tree, tolerant of a wide range of soils, although prefers light fertile soils. This year we are offering grafted trees. Z3. **ME Grown.**

03267 Evans, $24.00

Garfield Plantation Summer. Unknown origin. Garfield Plantation, ME. Heirloom pie cherry grown for generations on an Aroostook County farm. One of our most promising finds in our search for varieties that really do produce. In the spring of '09 trees in northern Maine flowered and fruited after –44°. Friends introduced it to me a few years ago. Although the original tree is long gone, it lives on in the form of innumerable young trees that have suckered up for 100 feet or more behind the farm along the edge of the ubiquitous potato field. You could keep it to a single tree yourself by snipping off any suckers. Hardy, disease resistant, productive and extremely long-lived. **ME Grown.** (3'-6')

03273 Garfield Plantation, $24.00



Mesabi Summer. Bing x chance seedling. (Sweet x sour cherry) Duluth, MN, 1964. Red skin and lighter red flesh with clear juice. Considered to be a sour cherry, but sweeter flesh than other pie cherries. Recommended for sauce and pies. Heavy yielding and extremely hardy. Will grow to about 10–14'. We recently consulted one central Maine grower who has been fruiting Mesabi for nearly 20 years. Thus far, the tree has remaining healthy and bearing. This is encouraging news; we are cautiously optimistic. Now on trial in our orchard. Z4. **ME Grown**.

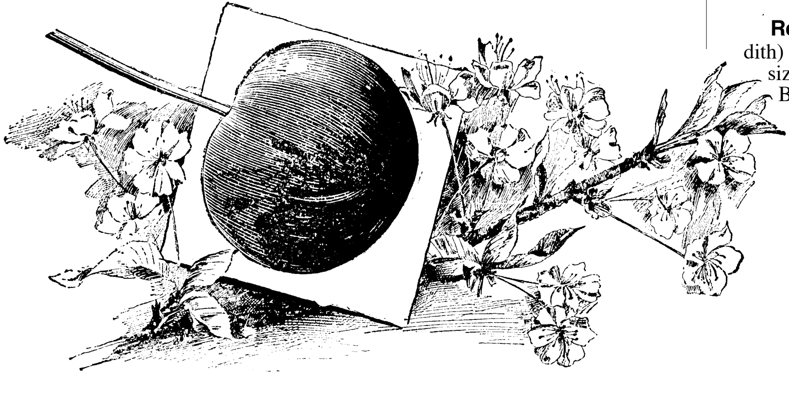
03276 Mesabi, $24.00

Meteor Summer. MN 66 (Montmorency x Vladimir) U Minn, 1952. Bright scarlet-red roundish-oval fruit. Clear bright yellow flesh and clear juice. Mildly acid flavor. Has proved to be a consistent producer in some locations but very susceptible to brown rot in others. In coldest districts, cropping has been inconsistent and hardiness questionable. In our Aroostook County test orchard, trees died to the ground after temperatures of –38°: not as hardy as Evans or Garfield Plantation. However, we still recommend it from central Maine south, Zones 4, 5 and 6, where some growers are having great success with Meteor. Very good eating right off the tree. Also good for pies, canning and freezing. Easy to pit. Excellent dried. Ripens mid-July in Central Maine. Reaches 12–16'. Z3. **ME Grown**.

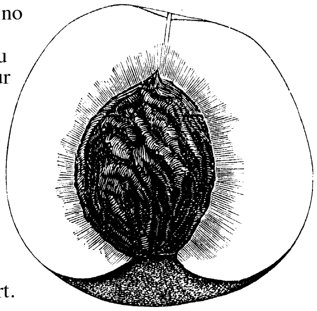
03279 Meteor, $24.00

Montmorency Summer. Seedling of Cerise Hâtive or Cerise Commune. Montmorency Valley, France, before 1600. Introduced to the U.S. about 1830. The most famous of all pie cherries. Not widely grown in Europe or Russia but long the standard of excellence in the U.S. Firm-fleshed bright red fruit makes a clear light pink juice. Surprisingly hardy, though not as hardy as Garfield Plantation and Evans. Our Aroostook County test orchard trees fare better than Meteor, but just barely. Should do really well from central Maine south. Appears to be resistant to brown rot. Vigorous productive medium-sized upright-spreading tree tolerates a variety of soils. Parent of Meteor. Z3. **ME Grown**. (3'-6')

03280 Montmorency, $24.00



Peaches *P. persica* Although many people will tell you not to bother growing peaches in Maine, if you've been repeatedly saddened by the poor quality available in the supermarket, what's there to lose? Many trees in northern New England produce large crops. They bear young and so heavily that they may break branches if unthinned or unsupported. Trees may die unexpectedly at any age; there are no truly hardy peach cultivars. But peaches are usually unaffected by pests or diseases in northern areas, the occasional exception being **peach leaf curl**. PLC is not a fatal problem but does need to be controlled if you get hit with it. Look for crinkled or puckered foliage in spring. Remove affected leaves and compost them. Spray the tree early the following spring while it is still dormant (before any buds open!) with lime-sulfur or copper. Onion, garlic or horsetail spray while leafed-out may also be effective.

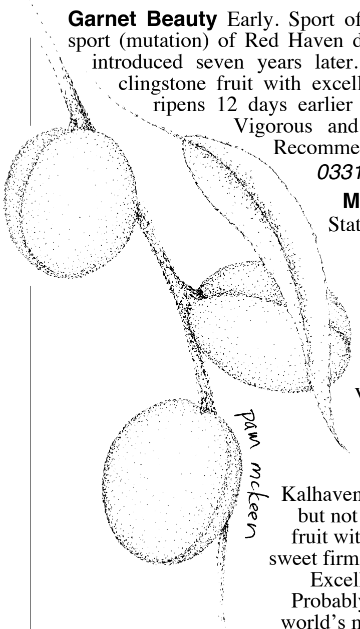


Some growers are miffed that they get no fruit after dutifully **pruning** their trees. Peaches fruit on last year's growth! If you prune it off, you'll get no fruit. Prune your peach trees in April or even May up north, once they begin to leaf out. Trim off any dead branches and leave most or all of the live wood. If your tree becomes leggy, make a few bold cuts each year back to a vigorous branch closer to the trunk. That will promote even fruiting throughout your tree.

Peach trees do not need a second variety for pollination. Plant 15-20' apart. ($3^{1}/_{2}$-6' trees)

Contender Mid-Late. NCT 544 (Winblo x complex parentage of North Carolina selections) DJ Werner, JR Ballington and DF Ritchie introduction, Ag Experiment Stn, Raleigh, NC, 1988. A fairly new high-quality hardy variety worth trialing in the north. Large round bright red and yellow freestone fruit with a slightly raised suture. Firm melting aromatic yellow flesh. Growth habit similar to Red Haven, ripens 3 weeks later. Resistant to leaf spot. Because it blooms quite late, it might escape late spring frosts. Z4/5.

03310 Contender, $24.00



Garnet Beauty Early. Sport of Red Haven. Ruthven, Ontario, 1958. A sport (mutation) of Red Haven discovered by Garnet Bruner in 1951 and introduced seven years later. Medium to large yellow-fleshed semi-clingstone fruit with excellent flavor. The earliest peach we offer; ripens 12 days earlier than Red Haven with similar hardiness. Vigorous and productive tree. Good bud hardiness. Recommended for colder disticts. Z5. **ME Grown**.

03319 Garnet Beauty, $24.00

Madison Mid-Late. Ideal x Red Haven. VA Station, 1963. A fine peach for the North, with hardiness similar to Red Haven (though it ripens 3 weeks later). Medium-large fruit with bright orange skin and bright red blush. Orange-yellow firm fine-textured juicy flesh with excellent very sweet rich peach flavor. Very good quality. Skin peels easily. Freestone, excellent canner. Very productive tree. Exceptional tolerance to blossom-season frost. Z5.

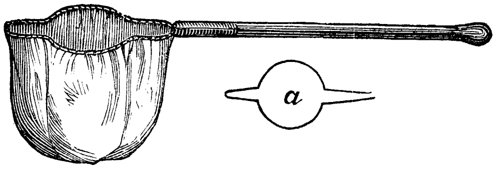
03331 Madison, $24.00

Red Haven Early. (Halehaven x Kalhaven) MI Ag Exp Stn, 1940. Considered hardy, but not as hardy as Reliance. Medium-sized round fruit with beautiful red and golden-yellow skin and sweet firm fine-textured yellow flesh. Non-browning. Excellent for eating, freezing, canning, shipping. Probably the best-flavored peach we offer; also the world's most widely planted freestone peach. Hardy buds; vigorous highly productive disease-resistant spreading trees are tolerant to bacterial spot. Z5/6. **ME Grown**.

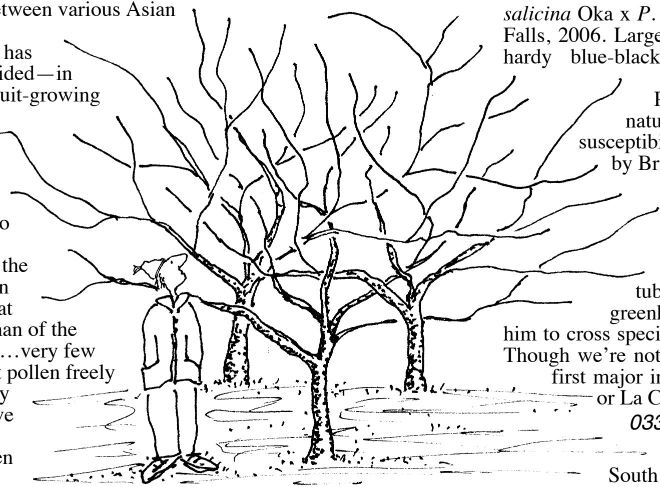
03346 Red Haven, $24.00

Reliance Early. (open-pollinated seedling of Minn PHO 4559 x Meredith) NH Ag Exp Station, 1964. Considered the hardiest peach. Medium-sized, roundish, freestone. Rather dull red blush over greenish yellow. Bright yellow flesh, soft and juicy. Flavor usually considered fair, but those who grow it in Maine love it. Often produces large crops. Bears at an early age. May have some resistance to peach leaf curl. Z5. **ME Grown**.

03349 Reliance, $24.00



Hybrid Plums *Prunus* spp. are extremely hardy crosses between various Asian and American species.



THE INTERTWINING HYBRID PLUM JUMBLE MEANS MORE FRUIT IN SEPTEMBER

Hybrid plum pollination has been glossed over—or avoided—in virtually all catalogs and fruit-growing literature for generations. Some years on our farm we were getting decent crops, but most years, not. We tried a number of different strategies as Fedco catalog readers will know. However Rick Sawazky at the University of Saskatchewan unearthed a 1934 article that quoted Prof. W. H. Alderman of the University of Minnesota: "…very few hybrid plums would accept pollen freely from other hybrids, but they all accept pollen from native plums." Perhaps the breakthrough we've all been searching for!

Our own suspicions, as well as our experiments, appear to corroborate this view. Here's what we recommend: plant a cluster of trees close enough together (3–6') for the branches to "co-mingle." Our "clusters" number from three up to nearly a dozen trees. Include native plum pollinators among the hybrids. With some decent sunshine during bloom, you should get good fruit set. Usually Toka, South Dakota and Kaga are recommended as the best pollinators among the hybrids. We also highly recommend planting pure *Prunus americana* (#**3375** or #**2832**) or *P. nigra* seedlings or grafted trees in the orchard. We include the American plum seedling in this hybrid section because it may be the best pollinator for the hybrids.

There has recently been speculation that pollination improves with heat. Growers in warmer districts often report better success with pollination and the thought is that colder temperatures may retard pollen production or even somehow render it ineffective. This could in part explain the fantastic plum crop up here in 2008. Not only was it sunny all during bloom, it was also warm.

Of course, plums are still susceptible to the small pesky insect, plum curculio. We have read that laying sheets of cardboard under plum (and apple) trees will smother the PC pupae developing in the soil. PC is not difficult to control organically with Surround (see the Organic Growers section of the Seed catalog). With decent pollinators nearby, Surround may not even be necessary. In 2008 we decided to skip Surround on one grouping of 8 trees and still got a good crop.

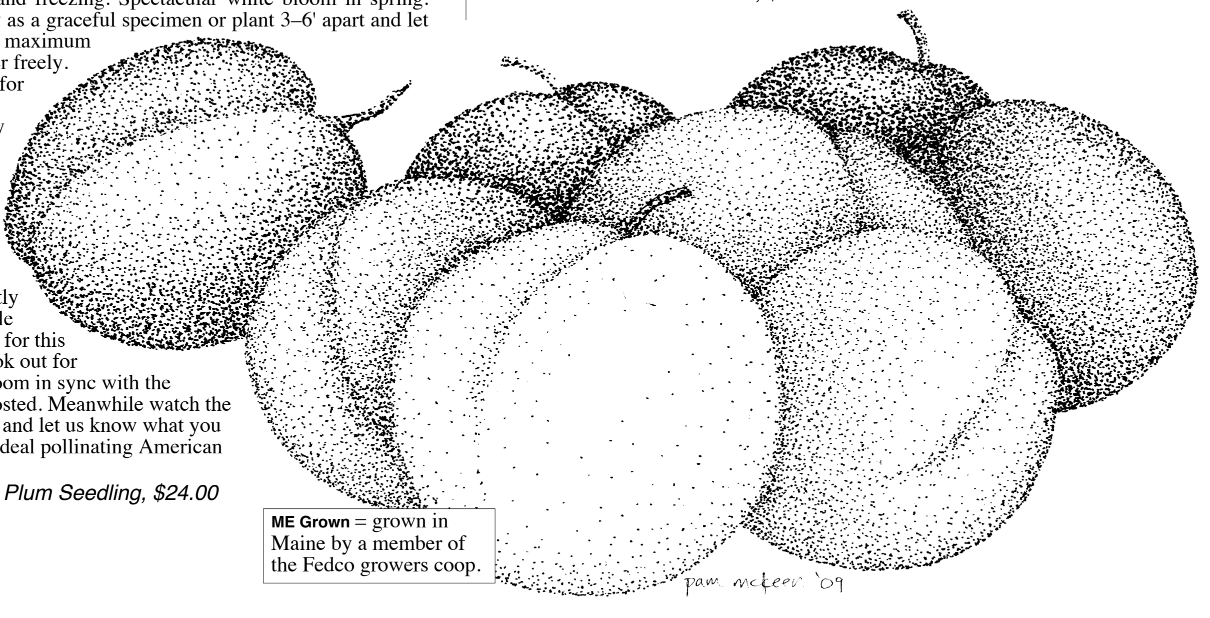
Bloom times similar for all varieties. Not susceptible to black knot. (3½-6' trees unless otherwise noted)

Hybrid Plum Collection A package of seven trees to begin your plum orchard. Our choice of 7 different trees, including at least two pollinators. **Plant trees in one cluster**, with about 3–6' between trees. Let the branches grow right into one another (see above) while still keeping them pruned to allow in plenty of air and light. Trees are individually labeled. **ME Grown**.

03371 Hybrid Plum Collection, bundle of 7, $145.00

American Plum Seedling *P. americana* 15-20' Seedling plum that grows in thickets and produces very decent red, yellow and orange 1" fruit, suitable for fresh eating, canning and freezing. Spectacular white bloom in spring. Red fall color. Plant singly as a graceful specimen or plant 3–6' apart and let the branches intertwine for maximum pollination. Tends to sucker freely. May be the best pollinator for hybrid plums. (See above.) Plant one of these for every 3 or 4 plum trees, within 10' of each of them. These trees are significantly larger than #**02832**, plum seedling rootstock. Extremely hardy. This year we noticed our Americans blooming slightly later than the hybrids. While this may have been a quirk for this year, it did inspire us to look out for Americans that reliably bloom in sync with the hybrids. We'll keep you posted. Meanwhile watch the trees in your own orchards and let us know what you find. Maybe you have the ideal pollinating American plum. Z3. **ME Grown**.

03375 American Plum Seedling, $24.00



pam mckeen '09

ME Grown = grown in Maine by a member of the Fedco growers coop.

Black Ice Midsummer. *P.* Lydecker [*P. besseyi* x *P. salicina* Oka x *P. sal.* Z's Blue Giant] U of Wisc, River Falls, 2006. Large 2" round early-ripening high-quality hardy blue-black dessert plum. Very sweet juicy reddish-purple semi-freestone flesh. Precocious and productive tree with a naturally compact growth habit. Average susceptibility to brown rot and black knot. Bred by Brian Smith who I visited a few years ago on a fruit exploration trip in the Upper Midwest. He graciously showed us all through his amazing nursery in River Falls. He was growing many of his plums in huge tubs, manipulating bloom time using greenhouses and coolers. This enabled him to cross species or varieties that would never normally flower together. Though we're not fans of plant patenting, we have been eager to offer his first major introduction. PVP 16621. The literature recommends Toka or La Crescent as a pollinator. Now on trial at our farm. Z3.

03389 Black Ice, $24.00

Ember Late Summer. MN 83 (*P. sal.* Shiro x *P. a. (?)* South Dakota #33) U Minn, 1936. Medium-sized roundish-conic slightly pointed mostly red-blushed fruit with a medium bloom. Rich yellow very firm but tender, meaty juicy sweet flesh. Recommended for cooking and fresh eating. Tastes and looks like an apricot. Low spreading vigorous tree. Underwood is said to be a good pollinator. Z3. **ME Grown**.

03410 Ember, $24.00

Gracious Late Summer. Mandan 41-15 [open-pollinated seedling of Emerald (*P. sal.* Burbank x *P. a.* Brittlewood) probably x Red Wing (*P. sal.* Burbank x *P. a. mollis* Wolf)] Northern Great Plains Field Station, Mandan, ND, 1957. Oval-to-roundish yellow-orange fruit with coral-red mottling. Yellow-orange firm juicy sweet flesh. We received our scionwood many years ago from the late Bob Kurle, one of the early members of NAFEX. Bob passed along his huge collection of plums, including this one, to me. Clingstone. Upright spreading tree. Z3-4. **ME Grown**.

03416 Gracious, $24.00

Kaga Mid-Late Summer. (*P. a.* seedling x *P. simonii* (Chinese apricot plum)) NE Hansen introduction. SD Stn, 1909. Small 1" purple-black fruit. Good eating out of hand when they're dead ripe. Exceptional in jams and jellies due to the meatiness of the black flesh. This is not one of those plums that dissolves and dribbles down your cheek. The most profuse bloomer in Mark Fulford's plum collection, coming right in the middle of plum season. Mark considers it to be an excellent pollinator for other hybrid plums. It's also been bearing reliably in his Monroe, ME, orchard. Now also on trial in our Palermo orchard. Dense naturally dwarf tree grows only to about 10'. *Kaga* is the Sioux word for 'pitch a tent.' Z3. **ME Grown**.

03425 Kaga, $24.00

La Crescent Late Summer. (*P. salicina* Shiro x *P. a.* Howard Yellow) U Minn, 1923. Also known as **Golden La Crescent** or **Golden Minnesota**. Most of the hybrid plum varieties are colored with some variation of red and orange with a little purple tossed in. Yellow-skinned La Crescent is one notable exception. The beautiful roundish tender thin-skinned yellow fruit is sometimes blushed with a little pink. Tender yellow juicy flesh of excellent quality is sweet, aromatic and suggestive of apricots. Freestone. Upright spreading vigorous tree. Z3/4. **ME Grown**.

03431 La Crescent, $24.00

Monitor Late Summer. MN 70 (*P. sal.* Burbank x *P. a.*), U Minn, 1920. Medium-sized roundish ovate pointed fruit. Thick deep purple skin has a thin bloom. Meaty tart strong-flavored orange flesh. Frank Foltz of the old Northwind Nursery in Minnesota described it to me as having a "strong, spice flavor on the tart side…too tart, perhaps, for most peoples' taste, but I like the sprightly flavor." Clingstone. Vigorous reliably fruiting productive upright spreading tree. Probably Z3/4. **ME Grown**.

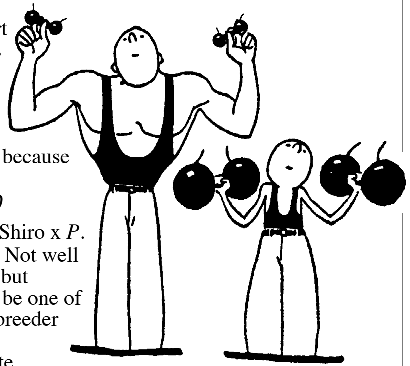
03437 Monitor, $24.00

Pembina Midsummer. (*P. sal.* Red June x *P. nigra* Assiniboine) NE Hansen intro, SD Exp Stn, 1923. Large pointy bright red fruit with bluish bloom. Dark golden-orange flesh is firm and apricot flavored. One of the first of the hybrids to ripen every summer, about the same time or a bit earlier than Underwood and well before the bulk of the plum crop. Z3/4. **ME Grown**.

03447 Pembina, $24.00

Superior Late Summer. MN 194 (Burbank x Kaga) U Minn, 1933. Very large conical dark red plum with a heavy bloom and 'superior' dessert quality. Firm sweet yellow flesh is smooth textured, extremely juicy and clingstone. Very good fresh eating. Precocious production, vigorous tree. Will show some dieback in coldest locations likely because of its Burbank parentage. Z3/4.

03482 Superior, $24.00



Tecumseh Midsummer. (*P. sal.* Shiro x *P. hortulana* Surprise) SD Stn, 1923. Not well known, and rarely sold anywhere, but considered by some enthusiasts to be one of the great early 20th century plant breeder NE Hansen's best introductions. Excellent fresh eating. Round-ovate bright red fruit with a bluish bloom. Firm juicy subacid yellow flesh. Reliable and productive. Named in honor of Shawnee Chief Tecumseh who refused to sign the Treaty of Greenville in August of 1795. Years later the chief predicted—and some say precipitated—the three earthquakes of late 1811 and early 1812, thought to be the worst quakes ever to strike North America. Just a few hours before the first one hit, the chief declared he would "stamp my foot on the ground and shake down every house." Tecumseh was later killed in the war of 1812. Z3/4. **ME Grown**.

03485 Tecumseh, $24.00

Toka Late Summer. (*P. a.* x *P. sim.*) Intro by NE Hansen, SD Exp Stn, 1911. Rosy red fruit, up to 1½" in diameter, mottled with darker purply red and covered with a faint bloom. Grower Don Johnson's comment was, "Talk about flavor: candy plum." Ed Fackler called Toka the best-flavored plum he grew in his Indiana orchard. Sweet, distinctive, meaty and flavorful. Not real juicy. Extremely vigorous tree blooms heavily every year. Diligent pruning may be required to keep it from becoming a bit of a monster. Considered to be a good pollinator for other hybrid plums. Somewhat freestone. Z3. **ME Grown**. (3'-6')

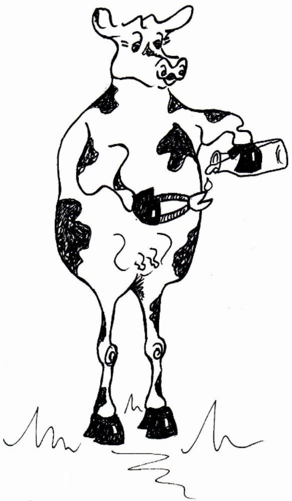
03488 Toka, $24.00

Underwood Midsummer. MN 91 (*P. sim.* x *P. sal.* Shiro x *P. a.* Wyant). U Minn, 1920. Medium to large 2" fruit. Yellow skin with dull red overcoat. Firm sweet juicy golden-yellow flesh, good for eating and cooking. Northern Maine grower Steve Miller considers it to be one of his most reliable bearers. Long picking season. Ripens earlier than most hybrids. Despite its mixed parentage, it may be a very good pollinator for other hybrid plums. It keeps appearing in literature and in conversations I have with growers. Vigorous large spreading tree blooms early. Clingstone. Z3-4. **ME Grown**.

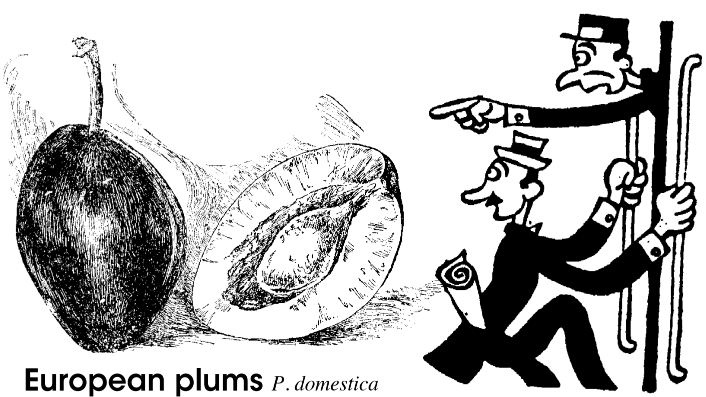
03491 Underwood, $24.00

Waneta Midsummer. (*P. sal.* Apple x *P. a.* Terry) NE Hansen intro, SD Exp Stn, 1913. Released one year after Kahinta, and with the same parentage, when hybrid plums were an important and commercially viable crop. Named after a Yanktonai youth who won fame in the War of 1812 and later became a great chief. Large 1½–2" reddish-maroon fruit, slightly less pointed than Kahinta. Sweet tender translucent orange flesh is very juicy but not dripping. Medium-thick skin, tart and easy to peel. Delicious overall taste. Hansen said of Waneta: "My belief is that in this variety I have combined the best points of the native and the Japanese plum. It is probably the largest [fruit] of over 10,000 seedlings." Early blooming healthy open spreading tree bears reliably in our orchard. Z3. **ME Grown**. (3'-6')

03497 Waneta, $24.00



STUDIES HAVE SHOWN THAT
NON-FAT MILK CAN BE USED
TO DISINFECT PRUNING TOOLS TO
REDUCE VIRUS TRANSMISSION



European plums *P. domestica*

Delicious fresh and often grown commercially for prunes. A true prune is a plum that can be dried without the pit fermenting. Although we've not tried it, we've heard recommendations that you blanch the plums for 45 seconds before drying them. They should be dry in a day or two. European plums produce smaller fruit and are generally not as hardy as the hybrid plums, though they can handle heavier soils and are less prone to brown rot. Unlike hybrids, they are prone to the fungal disease black knot, which looks like black chewing gum and appears on branches. While not necessarily fatal, it must be kept in check by removing and destroying infected branches. Trees grow upright and are usually trained to a central leader. Although **European plums are self-pollinating**, planting two different varieties will improve pollination. (3½-6' trees)

Mount Royal Late Summer. Chance seedling, Outremont, Quebec, before 1903. Popular plum in Quebec and the northern U.S. for many years. Also called **Mont-Royal**. Discovered by Mr. Corse in or near Montreal sometime during the period between 1830-1850. Bears abundant annual crops of medium-sized roundish dark-purple fruit. Often considered the sweetest of the European plums. The flesh is greenish-yellow, juicy and firm. Use fresh, dried, frozen, canned and in preserves. Medium-sized tree is open with good crotch angles and requires only moderate pruning. Z3.

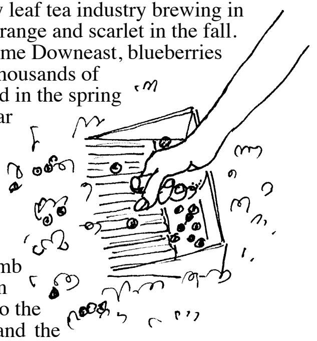
03543 Mount Royal, $24.00

Stanley Late Summer. (*P. d.* Agen x *P. d.* Grand Duke) NY Station, 1926. Most popular European prune plum in America with the possible exception of 'Italian'. Excellent for cooking, eating, canning and drying. Medium-to-large oval fruits with dark blue skin. Green-yellow firm but tender juicy fine-grained sweet flesh. Reliably bearing fast-growing adaptable medium-to-large funnel-shaped tree produces healthy vigorous annual crops. Z4. **ME Grown**.

03555 Stanley, $24.00

Small Fruits & Berries

Lowbush Blueberry *Vaccinium angustifolium* 6x24" Blueberry growers in Maine usually don't bother with the "lowbush" distinction; to them, this is the only true blueberry. Though both plants and berries are diminutive, the taste is supreme. Lustrous blue-green medicinal foliage is good in teas. There's even a new blueberry leaf tea industry brewing in Maine. Amazing combination of bronze, orange and scarlet in the fall. Grown in Maine long before Europeans came Downeast, blueberries are still a local favorite and cultivated on thousands of acres. Commercial blueberry land is burned in the spring to clear out the weeds; a crop follows a year later. To speed harvesting, berries are usually raked rather than hand-picked though you don't have to burn and rake to have a small-scale planting.



Invented in Maine well over 100 years ago by Abijah Tabbutt, the blueberry rake looks something like a cross between a comb and a dustpan. The body of the rake is even called the pan. You comb the rake a bit into the bushes (but not deeply so!), tilt it back and the berries pop off and roll into the pan. As the saying goes, "the lighter the hand, the more berries in the pan." You will also inevitably accumulate small twigs and leaves and various other odds and ends. Best raking is done on a breezy day. Lift the rake above your pail (we use a 5 gallon bucket) and pour. Ideally the berries will stream into the bucket while the twigs and leaves flutter off in the wind.

Native to northeastern U.S. Z2. (2-yr transplants)

03601 Lowbush Blueberry, bundle of 10, $40.00

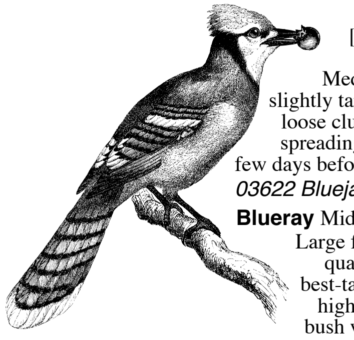
Lowbush Blueberries

Woodsy dry poor acid soil (pH 4.0-5.2) is a prerequisite for lowbush blueberries. If you've got white pine, you're probably all set. Plant 12" apart each way and cultivate as a ground cover. Generally self-pollinating; other blueberries nearby will help ensure pollination. Full sun is best for maximum fruit production. Keep your patch weed free.

Highbush Blueberries *V. corymbosum* are native to North America. While usually associated with New Jersey and Michigan, many of Maine's lakes are lined with massive stands of highbush blueberries. Grazing the shore requires only time and a suitable vessel; I prefer kayak or canoe. The beautiful vigorous shrubs are extremely easy to grow at home, productive and reliable, with few disease or insect problems. By planting several varieties, you can harvest berries from early July through most of August. **Two varieties are required, three or more recommended, for pollination**. (12-30" 2-yr-old plants)

Bluecrop Early-Midseason. GM 37 (Jersey x Pioneer) x CU-5 (Stanley x June) USDA, NJ, 1952. Medium-sized firm subacid fruit; very light blue berries of high dessert quality, resistant to cracking. Medium-large open clusters. Vigorous, upright 4-6' consistently productive bush. Ripens over a long season. May not be perfectly ripe when they first turn blue. Give them a few more days to reach full flavor before picking. Pruning will help maintain fruit size. Z4. **ME Grown**.

03620 Bluecrop Blueberry, $12.00



Bluejay Early-Mid. HBS400 [Berkeley x Michigan 241 (Pioneer x Taylor)] Michigan State U, 1978. Medium-large firm light blue fruit. Mild slightly tart flavor. Good dessert quality. Open loose clusters. Medium-sized upright slightly spreading form growing to 5–7' tall. Ripens a few days before Bluecrop. Z4. **ME Grown**.

03622 Bluejay Blueberry, $12.00

Blueray Mid. (GM 37 x CU-5) USDA, NJ, 1955. Large firm dark blue berries of high dessert quality in small clusters. Considered the best-tasting by nearly everyone who grows highbush blueberries. Very vigorous 4-6' bush with upright spreading habit. Consistently productive. Z4. **ME Grown**.

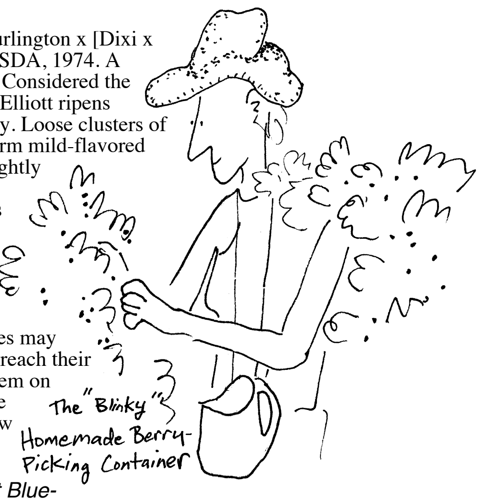
03624 Blueray Blueberry, $12.00

Chippewa Early-Mid. MN 393 [B18A (G65 x Ashworth) x US3 (Dixi x Michigan Lowbush No. 1)] U Minn, 1996. Lowbush-highbush type, only about 3-4' at muturity.Very light blue medium large sized firm fruit in compact clusters. Mild and sweet flavor similar to the best wild strains. Less acidic than Northblue. Foliage is a very lustrous green. Z3.

03626 Chippewa Blueberry, $12.00

Earliblue Extra Early. (Stanley x Weymouth) USDA, NJ, 1962. The first blueberry of the season to ripen. Moderately large medium-blue firm aromatic fruit with good dessert quality. Vigorous upright hardy moderately productive bush, with medium-sized loose clusters of berries that do not drop easily. Resists cracking. Some resistance to powdery mildew. Z4. **ME Grown**.

03632 Earliblue Blueberry, $12.00


The "Blinky" Homemade Berry-Picking Container

Elliott Very Late. Burlington x [Dixi x (Jersey x Pioneer)] USDA, 1974. A real season-extender. Considered the latest of all varieties, Elliott ripens two weeks after Jersey. Loose clusters of medium-sized very firm mild-flavored light-blue berries. Slightly spreading somewhat bushy upright plant is consistently highly productive in part because it blooms late and escapes spring frosts. Be forewarned: the berries may turn blue before they reach their peak flavor. Leave them on the bush until they are fully ripe. Check a few before you pick them all! Z4. **ME Grown**.

03634 Elliot Blueberry, $12.00

Jersey Mid-Late. (Rubel x Grover) USDA, 1928. The beloved old standard of blueberry introductions to which new varieties are compared. Medium-to-large dark blue berries in large loose clusters. Vigorous erect hardy bush, 5-7' tall. Productive, widely grown, adapted to a wide range of soils, highly praised, easy to grow and suited to the New England climate. Z4. **ME Grown**.

03636 Jersey Blueberry, $12.00

Meader Early-Mid. Elwyn Meader introduction, Univ of NH Ag Exp Stn, Durham, NH, 1971. Medium-large, medium-blue fruit with excellent flavor. Sweet with a hint of acid. Vigorous upright open lightly spreading form, 5–7' tall. Very hardy. Z4 or even Z3.

03638 Meader Blueberry, $12.00

Nelson Late. [(Bluecrop x G-107) (F-72 x Berkeley)] USDA, NJ, 1989. Highly rated newer release. Firm large-sized dark blue berries in loose clusters combines the great taste of Bluecrop with the large size of Berkeley. Particularly vibrant red fall foliage. Upright vigorous high-yielding 5-6' bush. Z4.

03640 Nelson Blueberry, $12.00

Northland Early. (Berkeley x 19-H) Mich St U, 1967. Early highbush x lowbush type bears long loose clusters of medium-small dark blue berries with excellent wild flavor. Very vigorous and productive, 3' moderately spreading bush has limber branches which tolerate snow well. Good for landscaping, bird forage and dessert. Hardy. Z3. **ME Grown**.

03644 Northland Blueberry, $12.00

Patriot Early-Mid. US3 [(Dixie x Michigan LB-1) x Earliblue] U Maine, 1976. Partial lowbush parentage. Adaptable to many soil types. Productive berry will fill your super bowl *every* year! Large firm berries with good color and excellent flavor. Upright open spreading 4' bush. Tolerant or resistant to some strains of soil fungus. Hardy. Z3. **ME Grown**.

03646 Patriot Blueberry, $12.00

Highbush Blueberries are shallow-rooted and like light acid soil (pH 4.0–5.2) with plenty of organic matter, good drainage, and plenty of water. Space them 3–6' apart (3' for the shorter varieties) in rows 8–10' apart. If your soil is lacking acidity, add peat, woods humus, or 1 cup elemental sulfur per bush.

Dig a hole at least twice the size of the root ball. If you use peat, soak it and then mix it with soil at a one-to-one ratio. We suggest soaking roots in Agri-gel. Plant at the same depth as in the nursery (or slightly deeper). Do not let the roots dry out! Pack the soil firmly and water thoroughly. Plants require at least 1" water per week during the growing season. On most soils, blueberries require regular applications of nitrogen. In the spring, fertilize with 21-0-0 fertilizer at a rate of 1–2 tablespoons per year-of-age plant (e.g., 3–6 Tb for a 3-year-old plant). Or use an organic equivalent such as $^1/_2$–1 qt composted hen manure per plant.

Fruit is produced on vigorous one-year shoots off healthy canes. As canes age they become twiggy and less productive. Begin pruning after three years. Head back long pieces of new growth for a bushier plant. Cut out weak or dead canes and dead tips. Each bush should be allowed to grow 6–10 canes varying in age from one to six years old. Thereafter, remove dead canes and those over 6 years old and encourage new replacement canes. Bushes with regular moderate pruning produce the most berries.

Berries may need net protection from birds. One of the best arrangements I've seen is John Meader's netted "house" in Buckfield. He has about 40 bushes growing under a framework made of posts and 2x4s and completely covered in netting.

Competition with grass may weaken and kill your blueberries. Mulch heavily (3–6" or more) every year with pine needles, cardboard, wood chips, hay, sawdust, even old slab wood. When using sawdust you may want to compensate by adding extra nitrogen.

Raspberries *Rubus* spp. We love raspberries. Fresh raspberries, frozen raspberries, raspberry smoothies, raspberry jam and especially raspberry pie. We even like the dried foliage—best taken from the first year primocances—which makes a delicious and healthful tea. A leaf and fruit vinegar is very high in minerals, and the leaf tea makes a great tonic for both uterus and prostate. The root bark is also medicinal. Native to North America, Europe and Asia, they are usually identified as *R. idaeus* or *R. i.* var. *strigosus*. 53 different *Rubus* species and subspecies live in Maine.

Everbearing types bear on first-year canes or primocanes. Everbearing raspberries are particularly valuable for northern growers because they can die to the ground (or be cut to the ground) and still produce a sizable crop the following year. Most everbearers ripen too late for growers in Zones 3 and 4 and cold areas of Zone 5. We don't offer Heritage, a popular producer of high-quality fruit, for that reason.

Summer-bearing cultivars bear on second-year canes or floricanes.

A second variety is not needed for pollination. Prior to planting, soak canes in Agri-gel (see sidebar below left; available here or in the Organic Growers Supply section of the Seed catalog.)

Please note: Raspberries have very fine, fibrous roots. Often they do not sprout from the plant stem after planting. This is OK. Be patient! Keep them well watered and they should all break dormancy, sprout from the roots and thrive for many years to come. (well-rooted bare-root canes)

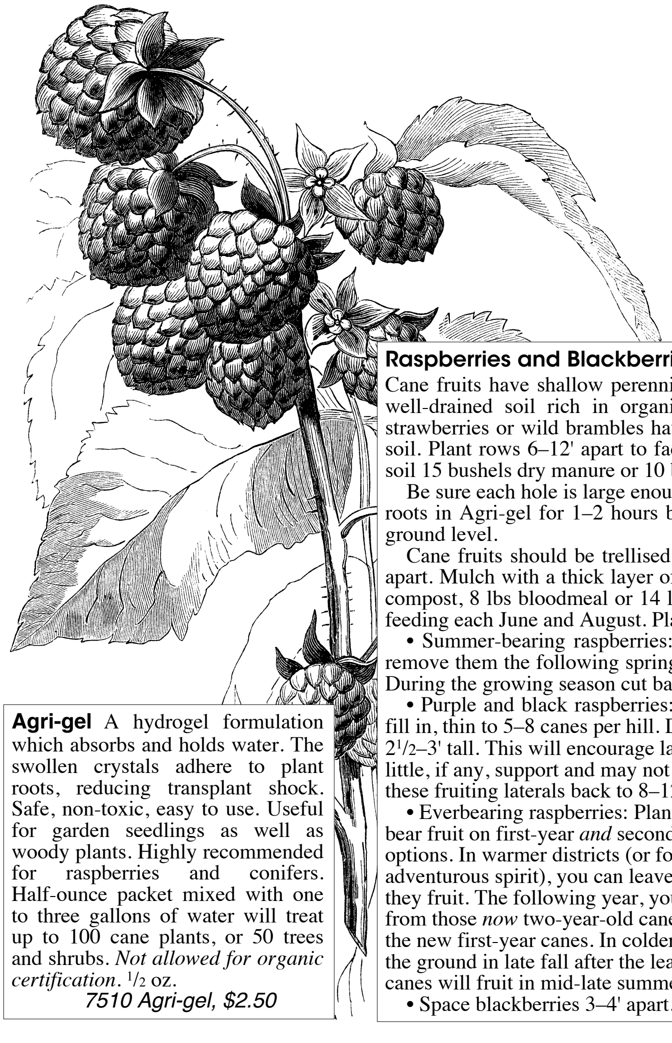
Everbearing Raspberries

Anne Late. JEF-b1 (Amity x Glen Garry) Flavorful everbearing yellow raspberry, ripens earlier than Kiwigold and is actually yellow, not a washed-out pink. Large cohesive fruit with good flavor. Tall rangy productive plant may sucker less than other everbearing types. Mulching or adding organic matter to the soil will encourage more suckering which should, of course, improve yield. Like other everbearing types, you may cut it right down to the ground after the season. Z4.

03801 Anne Raspberry, bundle of 10, $24.00

Polana Late. Heritage x Zeva Herbsternte. Research Inst of Pomology and Floriculture, Brzezna, Poland, 1991. Very early fruiting everbearing red raspberry has performed very well in our Fedco trials. Ripens in late August or early September in northern districts. According to David Handley of the University of Maine, "as near a thing to a sure bet." Large firm berries with very good flavor on vigorous and productive short canes. Easy to pick: the berries hang off the tops of the plants. Suckers freely. Z4.

03828 Polana Raspberry, bundle of 10, $24.00



Summer-bearing Raspberries

Boyne Red Early-Mid. (Chief x Indian Summer) Morden Research Stn, Manitoba, Canada, 1960. Round-conic medium-sized berries with an intense deep dark almost purple color. Strong aromatic tart raspberry flavor and a perfect medium soft texture. Once again, grower John Meader spoke glowingly of Boyne during the Tree Sale last May. Years ago he called it, "an excellent, excellent variety. Boyne is the one to beat if you're going to introduce a new raspberry." Extremely hardy. Shows no tip damage in Zone 3. Leaves tend to curl down over the fruit making it difficult to pick if you're in a hurry. Yields well, but less productive than Killarney. According to friends who make honey and fruit butters, there is no better raspberry for processing. No disease and very little pest damage. Z3.

03831 Boyne Red Raspberry, bundle of 10, $24.00

Killarney Early. (Chief x Indian Summer) Morden Station, Manitoba, 1961. Produces medium-to-large round crumbly fruit of excellent quality over a long season. Summer-bearing cultivar ripens after Prelude and before Nova. Same parentage as Boyne, but firmer texture and brighter color. Sturdy 4' canes. Yields consistently. Extremely hardy. Z4.

03835 Killarny Raspberry, bundle of 10, $24.00

Nova Mid. (Southland x Boyne) Kentville, Nova Scotia, 1981. Midseason red introduced relatively recently. In our trials Nova appears to be hardier than Boyne with fruit quality as good as or better than Boyne. Medium-sized firm somewhat acid bright red fruit. Summer-bearing. Upright productive minimally spiny canes produce long fruiting laterals which make the fruit easy to pick. Z3.

03843 Nova Raspberry, bundle of 10, $24.00

Royalty Purple Mid. (Cumberland x Newburgh) x (Newburgh x Indian Summer) NY Stn, 1982. Cohesive fairly firm large berries make outstanding jam and jelly and even better fresh eating. Their distinctive flavor is different from the red raspberries, with a hint of black-raspberry. Extremely robust minimally suckering plants are very productive and open-formed; the berries are right in your face and easy to pick. Ready to harvest when they are deep purple, somewhat later than the reds. Summer-bearing. Plant in hills (see sidebar). Usually considered Zone 4 but is proving itself into Zone 3 with occasional slight tip dieback. Does not like wet soil. Disease resistant. Z3-4.

03853 Royalty Purple Raspberry, bundle of 5, $24.00

Black Rapberries

Bristol Mid-summer. (Watson Prolific x Honeysweet) NY St Ag Exp Stn intro, Geneva, NY, 1934. Medium-large firm glossy black fruit with excellent flavor. Vigorous high-yielding plants. We had never planted black raspberries here on the farm for fear that they'd winterkill. Then a friend gave us a half dozen plants a couple of years ago and we have been thoroughly pleased. The fruit is delicious and they have so far proved to be hardy. They ripen earlier in central Maine than the summer reds and require a different pruning strategy. The canes are really long and will arch out over the horizon and then drop to the ground and root themselves. Let them do so, pile a little soil over the rooting spot and in a year or so you'll have more plants to spread around the yard or neighborhood. Or, prune the canes in mid-July to about waist high and you get branchier plants and more fruit. Susceptible to anthracnose and tolerant to powdery mildew. Soil and fertility requirements are like other raspberries. Z5/4.

03861 Bristol Black Raspberry, bundle of 10, $24.00

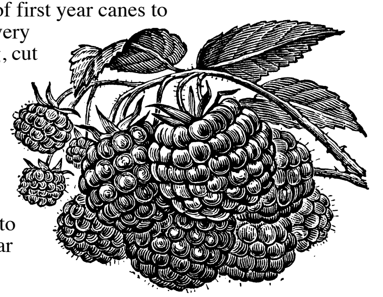
Raspberries and Blackberries

Cane fruits have shallow perennial roots and biennial fruiting canes. They prefer full sun, good air circulation, and well-drained soil rich in organic matter, with pH of 5.8–6.2. Avoid soils where tomatoes, peppers, potatoes, strawberries or wild brambles have grown because they all are subject to verticillium wilt, which may remain in the soil. Plant rows 6–12' apart to facilitate cultivation. See below for planting distances. Before planting, work into the soil 15 bushels dry manure or 10 bushels fresh manure per 100 sq ft. A well-kept patch can last for 10–20 years.

Be sure each hole is large enough to spread out the roots. Do not allow the fine roots to dry out. We suggest soaking roots in Agri-gel for 1–2 hours before planting. Plant 1–2" deeper than in the nursery and then cut the canes off at ground level.

Cane fruits should be trellised between two temporary or permanent wires about 3–4' off the ground and 18–36" apart. Mulch with a thick layer of woodchips or sawdust. Fertilize liberally each spring with up to 100 lbs manure or compost, 8 lbs bloodmeal or 14 lbs cottonseed meal per 100 foot row. Some sources recommend additional nitrogen feeding each June and August. Plants require 2" water per week during the growing season.

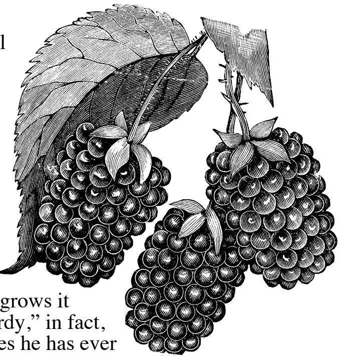
- Summer-bearing raspberries: Space 2' apart. After harvest, prune to the ground the canes that carried fruit (or remove them the following spring). Thin the fresh first-year canes to about 3–4" apart. They will bear fruit next year. During the growing season cut back canes to 5' if they are bending over severely.
- Purple and black raspberries: Plant in hills 3' apart. Basic pruning is same as summer-bearing varieties. As they fill in, thin to 5–8 canes per hill. During the early summer, pinch back tip of first year canes to $2\frac{1}{2}$–3' tall. This will encourage lateral fruiting branches. These will need very little, if any, support and may not require trellising. In the following spring, cut these fruiting laterals back to 8–12 buds.
- Everbearing raspberries: Plant 9–15" apart. Because everbearing types bear fruit on first-year *and* second-year canes, you have a couple of options. In warmer districts (or for northern New Englanders with an adventurous spirit), you can leave the first-year canes to overwinter after they fruit. The following year, you will get a light crop in early summer from those *now* two-year-old canes, followed by a larger crop later from the new first-year canes. In colder areas generally you would cut all canes to the ground in late fall after the leaves drop, or in early spring; new first-year canes will fruit in mid-late summer.
- Space blackberries 3–4' apart.



Agri-gel A hydrogel formulation which absorbs and holds water. The swollen crystals adhere to plant roots, reducing transplant shock. Safe, non-toxic, easy to use. Useful for garden seedlings as well as woody plants. Highly recommended for raspberries and conifers. Half-ounce packet mixed with one to three gallons of water will treat up to 100 cane plants, or 50 trees and shrubs. *Not allowed for organic certification.* $\frac{1}{2}$ oz.

7510 Agri-gel, $2.50

Blackberries *Rubus* spp.



Nelson's Midsummer. Virtually all commercial blackberry varieties are notoriously vigorous but tender up north. You wind up with an annual mess of thorny fruitless groundcover. Nelson has been surviving Maine winters for at least a century. Introduced to us by the descendants of Nelson Fronk whose 1928 family photograph taken on their farm northeast of Farmington shows the blackberry growing next to the barn. John Meader, who grows it for Fedco, calls it "exceptionally hardy," in fact, one of the most enduring blackberries he has ever grown. The inch-thick canes are tall, sturdy and upright. They can be grown on posts but also do well free standing. Fruit is moderately large, quite juicy and, when ripe, it has a sweet, true blackberry taste. What really makes this blackberry a standout is its high productivity: 16–18 blossoms on the central blossom stalk is the highest John has ever seen on a blackberry. He gets four good pickings from his patch over two weeks in mid-August. Nelson's makes excellent jelly and is good to eat right from the bush. Disease resistant and, like all blackberries, spreads quickly so give it room to move. We recommend planting in Zone 4 or maybe Zone 3. **ME Grown**. (well-rooted bare-root canes)

03888 Nelson Blackberry, bundle of 3, $26.00

***R. odoratus* Thimbleberry** 3-6' x 6-12' Also called **Flowering Raspberry**, **False Raspberry**, **Ornamental** or **Purple-flowering Raspberry**. Native ornamental relative of the cultivated raspberry suited for the garden and for attracting birds. Attractive five-petaled, rosy-purple fragrant blooms from June to August. Cup-shaped red berries are edible and although many sources recommend against eating them, some people love them. Birds love them too. Lobed palmate maple-like leaves turn pale yellow in fall. Dried leaves can be used in a medicinal tea similar to its fruiting cousin. Very vigorous hairy thornless stems will sucker and spread, forming a colony. Average soil. Good shade tolerance. Native to eastern North America. **ME Grown**. ($2^{1}/_{2}$-5' plants)

03895 Thimbleberry, $12.00

Strawberries *Fragaria* x *ananassa*

A major highlight of every summer is picking strawberries. In central Maine strawberry season usually coincides with the summer solstice. Although no one knows where the common name *strawberry* originated, idle speculation has it that it comes from the practice of putting straw down between the rows for pickers to sit on while they sample the fruit and catch up with each other.

Modern strawberries, developed about 1830, are a hybrid of *F. chiloensis* (native of Chile) and *F. virginiana* (native of North America). Royce Bringhurst of the University of California, Davis, developed day-neutral strawberries from wild plants found in Utah's Wasatch Mountains. He crossed these with modern commercial varieties and introduced the first day-neutrals in 1980.

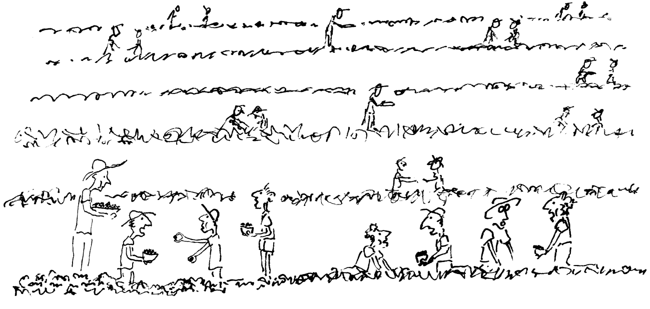
50 plants will plant from 50-100'. (virus-free bare-root stock)

Earliglow Early. MDUS 3861 [MDUS 2359 (Fairland x Midland)] x [MD2713 (Redglow x Surecrop)] Maryland Ag Exp Stn, 1966. Medium-sized berries. Best for fresh eating and freezing. Excellent flavor for an early berry. Barbara Bowling called it the best flavored of all varieties in *The Berry Growers Companion*. Also *the* favorite of local strawberry growers Shaun Keenan and Benji Knisley of Sand Hill Farm. Resistant to red stele and verticillium wilt. Considerably more productive in southern New England than up north. Z3.

07015 Earliglow Strawberry, bundle of 50, $15.00

Honeoye Early-Mid. NY 1409 (Vibrant x Holiday) NY Station, 1979. Tough, hardy, vigorous, extremely productive, and easy to grow. The freezer-filler of the strawberry patch. Large conic bright red fruit produced over long fruiting season. Firm flesh with tart—and surprisingly good—flavor. Excellent freezing quality. A week before Jewel. Probably the most popular commercial berry in the Northeast. Plant in well-drained soil to avoid red stele. Susceptible to verticillium wilt. Z3-4.

07023 Honeoye Strawberry, bundle of 50, $15.00



Jewel Mid-Late. NY 1324 [(Senga Sengana x NY E-58) x Holiday] NY Stn, 1985. Shaun Keenan suggested that we add Jewel to our list; he even went so far as to say that Jewel tasted almost as good as Sparkle. Although I don't think I'd go quite that far, I was very impressed with the berry. Large bright red glossy perfectly shaped fruit is firm, sweet and slightly aromatic. Unlike Sparkle, Earliglow and many other varieties, it keeps its size all season. Extremely popular with commercial growers and Gene's favorite. Good freezing quality. Low incidence of fruit rots and foliar diseases. Not resistant to verticillium or red stele. Z4.

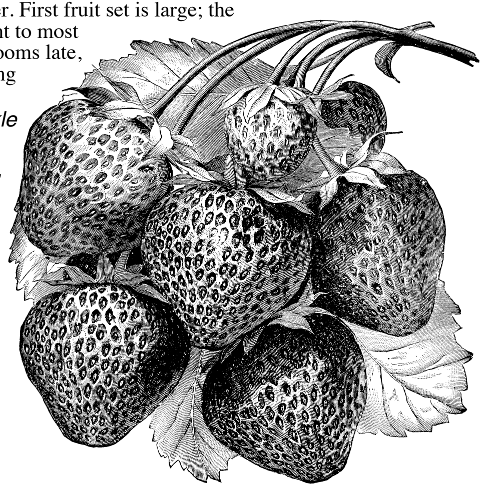
07027 Jewel Strawberry, bundle of 50, $15.00

Seascape CN 49. Developed by Royce Bringhurst, U Cal, Davis, 1991. **Everbearing** day-neutral strawberry sets flower buds regardless of day length, fruiting all summer and into fall. Remove flower buds for the first six weeks after planting and you'll still get a crop the first year. Seascape is showing excellent results in Northeast trials. Medium-to-long conic high-yielding firm productive reliable fruit with bright red color and excellent flavor. Produces over a very long season. Broad resistance to fungal diseases. Somewhat susceptible to common leaf spot and two-spotted spider mite. Should be hardy in all but the coldest districts. Z3.

07035 Seascape Strawberry, bundle of 50, $18.00

Sparkle Mid-Late. (Fairfax x Aberdeen) NJ Ag Exp Stn, 1942. Although not a favorite with commercial growers due to moderate crop size and smaller berries, I've yet to taste a strawberry that comes even remotely close to Sparkle. To me, they possess a flavor that can only be described as the essence of strawberry. The best in an early year, the best in a late year, the best this year, last year, every year. This is the berry if you want to eat the perfect strawberry. Soft berries make delicious fresh eating and are also excellent for jams and freezing. One of its few drawbacks is that it tends to lose color in the freezer. First fruit set is large; the rest are small. Resistant to most strains of red stele. Blooms late, rarely affected by spring frost. Z3.

07039 Sparkle Strawberry, bundle of 50, $15.00



Strawberries

Keep cold or refrigerate between arrival and planting. Strawberries require good air drainage, well-drained fertile soil with pH of 5.8–6.2, thick mulch and full sun. Avoid soils where tomatoes, peppers or potatoes have grown in the past 4 years. Plant strawberries at the same depth as they were in the nursery, with the middle of the crown at soil level. Keep your patch free of weeds. They require $^{3}/_{4}$–1" water per week during April, May, August, September and October. Mulch with hay or straw in late fall to protect plants over winter. In the spring, pull mulch off plants and place between rows where it will keep fruit dry and clean during the summer. It can also be raked back over the plants if frost threatens flower buds. Floating rowcover may also be used for winter and frost protection.

June-Bearing Strawberries

Matted Row system: Set plants 12–24" apart in rows 3' apart. Allow plants to produce runners freely and fill in the row. Remove all flowers the first year. Harvest berries the second summer. Immediately after harvest, fertilize liberally with compost or aged manure and renovate the row. By hand or with a tiller, narrow the row to 12" wide. Thin plants to 4–5" apart within the row. By this method a bed can last about 5 years. Then plow it under and start again.

Everbearing or **Day-Neutral Strawberries** (like Seascape) flower regardless of day length as long as temperatures are between 35 and 85°, and produce fruit from June to October. They are also uncommonly productive—about one pound of fruit per plant the first year, and slightly less the second year. Productivity peaks in August the first year. The second year, berry size decreases in the hottest weather and increases in cooler weather.

They are heavy feeders and benefit from 3–4" of manure worked 4–6" into the soil prior to planting, and monthly side-dressing of manure throughout the season. Plant 6–12" apart. Mulch with black plastic or thick straw immediately after planting. Remove flowers for the first six weeks, and remove all runners the first season. Mulch in late fall. Side-dress with manure monthly during the second season beginning in May. Till under after the second year and begin again.

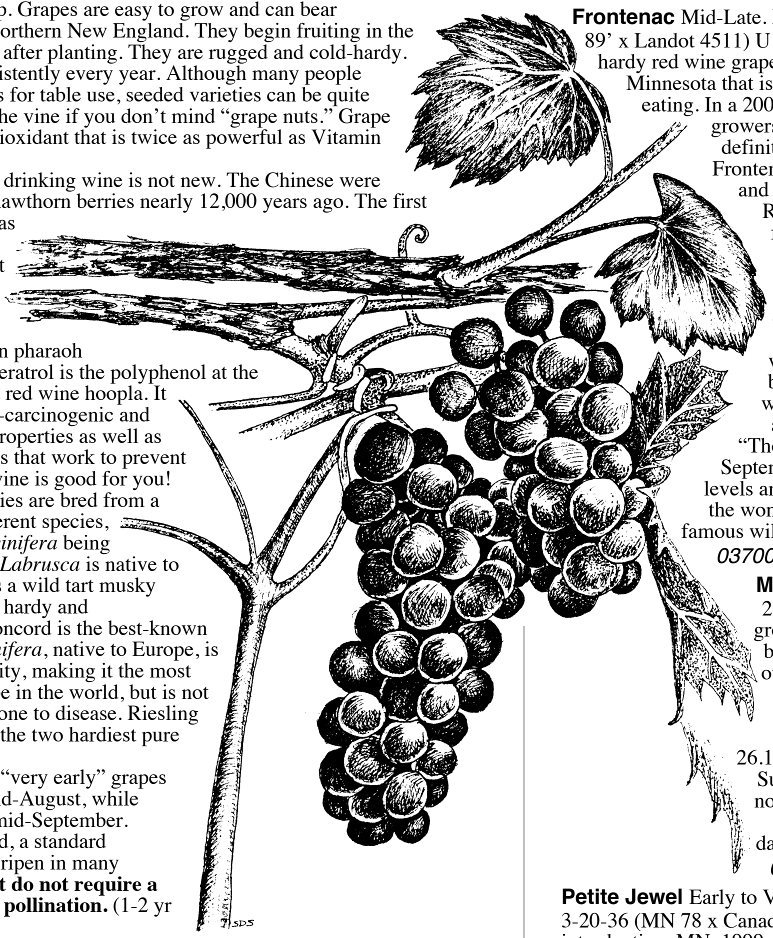
Vines are slender long-stemmed climbing or trailing plants. Some have tendrils; others simply twine their way around whatever gets in the way. Generally they love to climb. Some have edible fruit of course. Some have medicinal value. Some will attract hummingbirds, bees and other wildlife. Many are magnificently ornamental. Grapes cover the arbor where we dine on hot summer afternoons. Kiwis and roses cover the arbor that acts as a walkway from the driveway to our gardens. Hops climb on strings all the way to the very peak of our barn. Aristolochia—Dutchmans Pipe—shades our porch. Every year we offer an assortment of the best vines for the functional landscape. (For climbing roses, see page 43.)

Grapes *Vitis* spp. Grapes are easy to grow and can bear plentifully even in northern New England. They begin fruiting in the second or third year after planting. They are rugged and cold-hardy. Our vines bear consistently every year. Although many people prefer seedless types for table use, seeded varieties can be quite enjoyable right off the vine if you don't mind "grape nuts." Grape seeds contain an antioxidant that is twice as powerful as Vitamin C.

The popularity of drinking wine is not new. The Chinese were fermenting it from hawthorn berries nearly 12,000 years ago. The first wine from grapes was likely made in Turkey or Iran about 5,000 BCE. Traces of red wine were even found in the tomb of the Egyptian pharaoh Tutankhamen. Resveratrol is the polyphenol at the center of the current red wine hoopla. It appears to have anti-carcinogenic and anti-inflammatory properties as well as anti-microbial agents that work to prevent heart disease. Red wine is good for you!

Most grape varieties are bred from a combination of different species, *V. labrusca* and *V. vinifera* being the most important. *Labrusca* is native to the eastern U.S., has a wild tart musky (foxy) flavor, and is hardy and disease-resistant. Concord is the best-known of the labruscas. *Vinifera*, native to Europe, is extremely high quality, making it the most important wine grape in the world, but is not cold hardy and is prone to disease. Riesling and chardonnay are the two hardiest pure *vinifera* grapes.

In central Maine, "very early" grapes begin ripening in mid-August, while "midseason" ripen mid-September. Late-season Concord, a standard elsewhere, does not ripen in many northern areas. **Most do not require a second cultivar for pollination.** (1-2 yr well-rooted vines)



Beta Midseason. (*V. riparia* x Concord) Originated by Louis Suelter (pronounced *Sool*-ter) in Minn, 1881. Beta was named after his wife and is pronounced *Bett*-uh not *Bay*-tuh. Old standby, excellent for juice, jelly and jam. Decent eating off the vine when completely ripe. Medium-sized black berries in moderately compact to loose clusters. Early to bloom, early to ripen. Vigorous healthy productive vines, extremely hardy. Z3. **ME Grown**.

03671 Beta Grape, $12.00

Bluebell Mid. MN 158 (Beta x unknown) Developed by JM Dorsey, U Minn, 1944. Our most popular seeded grape; it does everything well. Extremely hardy, to –30°, *labrusca* type ripens 2–3 weeks earlier than Concord. While it ripens beautifully from central Maine south, it may not have time to ripen in some northernmost locales. Delicious sweet flavor makes them excellent for fresh eating, jelly and juice. Clusters of medium-sized dark berries with a heavy blue bloom. Strong, productive, vigorous—but not rampant—vine. A joy to grow. Immune to most or all fungal diseases. Rare. Z3.

03674 Bluebell Grape, $12.00

Chontay Early. (Massasoit x Beta) Brookings, NE Hansen introduction, SD Stn, 1925. A generally forgotten variety from the Upper Midwest that we've been trialing in our vineyard for the past 20 years. We like this grape. Medium-sized loose clusters of large purple fruit. Good fresh eating. In an old issue of the Minnesota Grape Growers' *Notes from the North*, Tom Plocher wrote, "I have grown kind of fond of this grape for its beauty and spicy, fruity (but not labrusca) flavor, not to mention its hardiness. It was one of the few varieties that bore fruit this year following our -41° winter." Not considered a wine grape unless you like a strong-flavored brew. Vigorous vine. Z3.

03683 Chontay Grape, $12.00

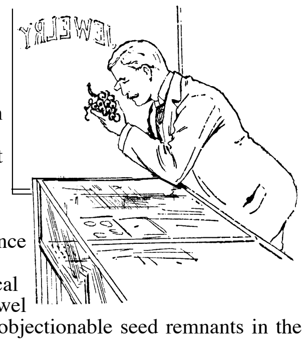
Frontenac Mid-Late. MN1047 (*V. r.* 'RIP 89' x Landot 4511) U Minn, 1996. A recent hardy red wine grape from the University of Minnesota that is also excellent for fresh eating. In a 2007 study of Minnesota growers and winemakers, the definite majority preferred Frontenac both for its cultural and winemaking qualities. Recommended for dry full-bodied Merlot- or Bordeaux-style table wines, rosés and ports. Very large loose clusters of small berries. Vigorous very productive largely disease-free vines. Intense juice color, low tannins, high sugar and high acid content. Maine grape researcher and tester Jerry Rodman wrote to me, "Frontenac has made some good wines, but is very high in acid and is probably best for areas with high heat accumulation (which helps to lower its acid)." In *Notes from the North*, John Marshall adds, "Though the sugar may rise to impressive levels early in September, the grapes are not nearly ripe. Ignore the sugar levels and wait until September 20th. The acid will drop and the wonderful black cherry flavors that will make this grape famous will multiply." Z4-5.

03700 Frontenac Grape, $12.00

Marquette Mid to Late. MN 1211 (MN 1094 x Rivat 262) U Minn, 2006. A wine grape that many northern growers have long awaited. One parent, MN 1094, has both *V. riparia* and *V. vinifera* in its background. The other, Rivat 262, is a French hybrid with pinot noir as one of its parents. Not only is Marquette heavy with *vinifera*, the vines are also extremely hardy. And there's more: sugar levels are high—in the range of 26.1 Brix—and the acid levels are lower than Frontenac. Substantial tannins will add complexity to your "pinot noir"-style red table wine. Small-medium bluish-black berries in small-medium sized clusers. Ripens a few days before Frontenac. Z3.

03732 Marquette Grape, $12.00

Petite Jewel Early to Very Early. ES 3-20-36 (MN 78 x Canadice) Swenson introduction, MN, 1999. Small pink or light red seedless grape with exquisite flavor. Somewhat larger than a garden pea. PA grower Ike Kerschner wrote in an email to me, "The flavor in my opinion is superior to Canadice and possibly the best flavored out of my collection of most of the available eastern seedless grapes….When selling Petite Jewel [at farmers' market] there is always a reluctance by buyers because of the small berry size. One taste convinces even the most skeptical customer." John Marshall called Petite Jewel "very tasty, even remarkably tasty." No objectionable seed remnants in the fruit. Small loose clusters. While Minnesota growers have largely given up on Petite Jewel due to its marginal hardiness, it should be worth trialing from central Maine south. Probably hardier than both Reliance and Canadice, though not as hardy at Somerset. Z4-5.



03749 Petite Jewel Grape, $12.00

Grapes prefer soils with pH of 5.8–7.0. For best grapes, provide moderate fertility, very well-drained soil and full sun. Every June we thoroughly weed the grapes under our arbor, then mulch very liberally with old hay. After that, we don't do a thing to them except harvest in late summer and prune in late fall. Space 8–12' apart in rows 8–12' apart.

Spread the roots out, planting the crown even with the soil surface. Do not prune roots. Pack soil well. Water and mulch well. After frost danger has passed, prune vines back to 3–5 strong buds. Continue to mulch annually with hay or straw. Every few years fertilize liberally with granite dust.

Grapes require annual pruning and a trellis or arbor, though in Italy they still sometimes grow them in maple trees. All systems for growing grapes involve removal of most growth in spring or late fall to encourage new canes, as fruit is produced on these canes. There are many systems for training grapes. Some are suited to laying down and covering tender varieties over winter. Any good book on grape growing will show you several options. We suggest the Hudson River Umbrella or the Four-arm Kniffin system.

People sometimes ask about wire. The current vineyard standard is high-tensile-strength class III galvanized steel wire. The gauge should be 11 to 12.5. The wire is generally sold by weight. 100 pounds of 11 gauge measures about 2600 feet. 100 pounds of 12.5 measures about 3800 feet.

Grapes rated for Zone 5 can be grown in Zones 3 and 4. To prevent winter injury, remove the vine from the trellis in fall, lay it on the ground, and bury with just enough soil to cover. This task is neither difficult nor time-consuming, and does work.

Vines, continued

Reliance Seedless Very Early. Arkansas 1163 (Ontario x Suffolk Red) Arkansas Stn, 1982. Still the highest-quality seedless grape for the North, although the recently released Somerset Seedless is looking pretty nice. Good for fresh eating or juice. Large loose clusters of tender melting sweet pinkish-red fruit with a strawberry-like flavor. Stores well in a root cellar for 1–2 months. Seems hardy although it has shown significant dieback in our Zone 4 trials. You may need to lay vines down for the winter in colder areas (see sidebar). While the literature cautions about Reliance's disease susceptibility, our vines have performed well and have remained disease-free. Z4-5.

03755 Reliance Seedless Grape, $12.00

Sipaska Early. Also spelled **Siposka**. [Lady (old eastern labrusca-vinifera) x N.D. (*V. riparia* collected in Bismark, ND)] NE Hansen intro, SD State Experiment Stn, Brookings, SD, 1925. Very early ripening, small tight clusters of blue-black grapes suitable for juice and wine. Minnesota grower and writer Tom Plocher describes the wine as "a wild riparia flavor, very rich and complex." Also recommended for blending, particularly in beefing up weaker reds. One of the 32 grapes introduced by the great American plant breeder. Most of the others are gone, but Sipaska remains valuable to grape lovers. No disease at all. Z4 or maybe even Z3.

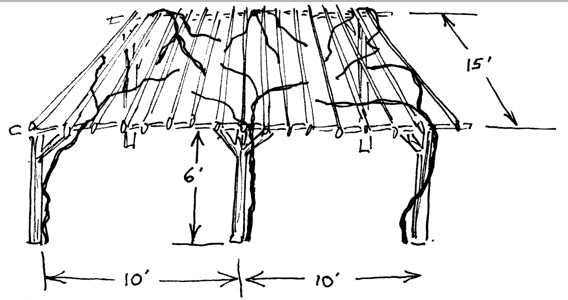
03761 Sipaska Grape, $12.00

St Croix Mid. ES 2-3-21[ES 283 (MN 78 x Seibel 1000) x ES 193 (MN 78 x Seneca)] Elmer Swenson introduction, Osceola, WI, 1981. Very juicy low-acid medium-blue, medium-sized berries and clusters. Primarily a wine grape that produces high-quality pale red juice and excellent vinifera-type fruity dry red vino. Very popular among northerners as the primary variety in blended reds. Very hardy though probably not suited to the coldest districts. Disease resistant. Z3-4.

03764 St. Croix Grape, $12.00

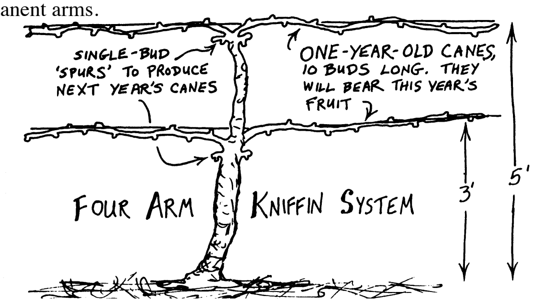
Somerset Seedless Early. ES12-7-98 (ES5-3-64 x Petite Jewel) Swenson intro. Although not as hardy as Beta, Bluebell and Chontay, Somerset is likely the hardiest seedless grape available today. One of the last Swenson introductions before the renowned and beloved grape breeder passed away in December 2004. Medium-sized loose clusters with small sweet ruddy reddish-golden fruit. Crispy texture and great flavor. Easy to grow but not overly vigorous. Z4.

03775 Somerset Seedless Grape, $12.00



Growing Grapes on an Arbor

Train one or more vines onto an arbor or gazebo; we have 8 vines, spaced about 10' apart. Prune each vine back to a single trunk. Encourage several permanent arms from each trunk. Every winter remove 70-90% of the the past summer's growth. Next summer new fruiting canes will grow off the permanent arms.


SINGLE-BUD 'SPURS' TO PRODUCE NEXT YEAR'S CANES
ONE-YEAR-OLD CANES, 10 BUDS LONG. THEY WILL BEAR THIS YEAR'S FRUIT
3'
5'
FOUR ARM KNIFFIN SYSTEM

Pruning Grapes in the Four-Arm Kniffin System

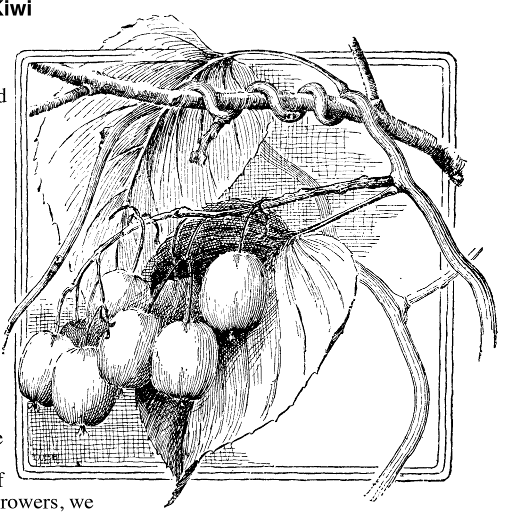
First year: Cut plant back when planting to a single stem, 6" long with two to three buds, after the last danger of frost has passed.

Second year: Set up two wires, 3' and 5' high, stretched between posts. Cut plant back to a single stem, 6 feet long and tie it to the top wire. Leave 4-6 buds near each wire and remove others.

Third year: Select 8 canes, 4 for each wire, and remove the rest. Tie two canes to each wire, one in each direction. Cut these four canes back to 10 buds each. Cut the remaining four canes back to one or two buds each.

Later years: In the spring, remove last year's fruiting canes. Select eight new canes. Cut 4 of them to 10 buds each, and tie them to your wires. Cut the remaining four back to two buds each. These will produce next year's fruiting canes. Remove all other canes. The number of buds left on the fruiting canes may be adjusted to encourage more fruit or larger size.

Actinidia Hardy Kiwi



Productive twining vine climbs 20' or more and produces delicious grape-sized kiwi fruits in late summer. Unlike supermarket kiwis, the skin is smooth and edible. Easy to grow in rich well-drained soils. Will begin producing in 5–9 years. No significant pest or disease problems. Some growers have been frustrated with vines that have proven unproductive or not hardy. After consulting several of Maine's long-time growers, we believe that we've found a winning combination. We think you'll be pleased with our choices. We'll be offering more varieties in the years to come. Both male and female plants required for fruit. One male will pollinate at least three females. Z4. (well-rooted 2-3 yr vines)

***A. arguta* Michigan State** (**female**) Summer. Michigan State University. Grower Tom Vigue calls the thumb-shaped thumb-sized fruit, "sweet and most highly luscious." The fruit is a bit sour to my palate. Although it might make you wince, the overall experience is joyous and delicious. Larger than other varieties.

04053 Michigan State Female Kiwi, $14.00

***A. a.* Meader** Hardy **male** kiwi suitable for pollinating Michigan State female. Extremely vigorous fruitless vines are often grown just for their beautiful dark green ornamental foliage.

04065 Meader Male Kiwi, $14.00

***A. kolomikta* Red Beauty** (**female**) Summer. A lesser-known but extremely hardy kiwi species. Fruit is smaller—and some say tastier—than arguta fruit. Vines are not as wildly vigorous. (Argutas can just about pull down a tree.) Hardier than the argutas, should thrive even in northernmost districts. Prefers moist neutral to slightly alkaline well-drained average soil. Full sun to partial shade. Requires Arctic Beauty or any male kolomikta for pollination. Arguta males will not pollinate Red Beauty. Native of eastern Asia. Z3/4.

04081 Red Beauty Female Kiwi , $14.00

***A. k.* Arctic Beauty** Fruitless **male** pollinator for Red Beauty kiwi. Often grown by itself as an ornamental for its beautiful foliage. Young leaves emerge purple, then become variegated pink, white and green. Same cultural requirements as Red Beauty. Heat, excessive fertilization and shade may reduce the leaf color. 1/2" white 5-petaled fragrant flowers. One male will pollinate several females. Native of eastern Asia. Z3/4.

04083 Arctic Beauty Male Kiwi, $14.00

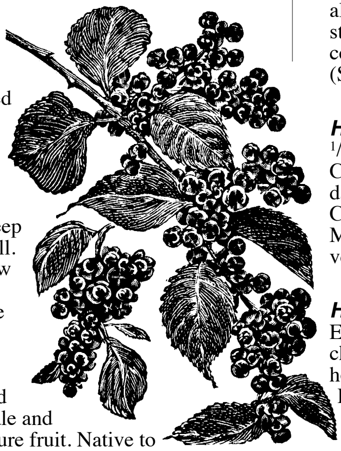
Kiwis are dioecious vines, meaning male and female flowers are on separate plants, so you must plant a male plant to pollinate the fruiting female plants. They are extremely vigorous and require a rugged trellis or arbor and heavy pruning. Plant vines 10' apart each way in moderately rich moist but well-drained soil (pH 5.0–6.5). One male will pollinate several females as long as they are within approximately 30' of the male. Although the vines are quite hardy, the flowers and foliage are frost sensitive. Planting on a northern exposure will delay budding in spring and reduce risk of frost damage. Protection from winter winds and intense winter sun is also recommended. Mulch with hay or wood chips. On poor soil fertilize with compost annually.

On a trellis: Train a single trunk to the trellis wires and then train two permanent 7–10' cordons (arms) off the trunk. Each winter remove at least 70% of old growth, leaving a dozen or so one-year-old laterals. That year's fruit will develop on fruit spurs growing off these one-year-old canes (laterals). On extremely rampant vines, summer pruning may be required to keep the vines from choking out your farm.

On an arbor or gazebo: Once established, prune 70% of the old growth each year and leave some new canes for this year's fruiting.

***Aristolochia durior* Dutchman's Pipe** 20-30' Also called **Pipe Vine**. Vigorous climber with large wonderful 4–10" heart-shaped dark green leaves. Once established, it will cover the porch or trellis or gazebo every summer. Beware though—one vine can peel the shingles right off the side of your house! Provides all the privacy you ever wanted even if you live right in town. Inconspicuous U-shaped tubular white and mahogany flowers in clusters of 1–3 look like "Dutchman's Pipes." Sun or shade. Thrives in shade. Likes well-drained soil with adequate moisture. Native to eastern U.S. Z4. (2-yr #1 plants)

04091 Dutchman's Pipe, $12.00



***Celastrus scandens* American Bittersweet or False Bittersweet** 20' or more. A highly ornamental native vine. The insignificant flower display in spring is followed by beautiful grape-like clusters of small reddish-orange to orange-yellow berries used for holiday wreaths and other dried flower arrangements. Also beautiful right on the vine. (This is *not* the invasive Asian Bittersweet, *C. orbiculatus*, which you should never grow!) Deep glossy summer foliage turns yellow-green in fall. Very vigorous climbing twining habit, will grow in nearly any soil although it does not like the driest sites. Suitable for covering porches, stone walls, rough hillsides, old cars and unsightly outbuildings. Prune it extensively every year to keep it from taking over. Prefers full sun. Male and female required for fruit. These are unsexed vines. Although some plants may have both male and female flowers, plant two or three plants to ensure fruit. Native to eastern North America. Z3. **ME Grown**. (1-yr well-rooted plants)

04097 American Bittersweet, $10.50

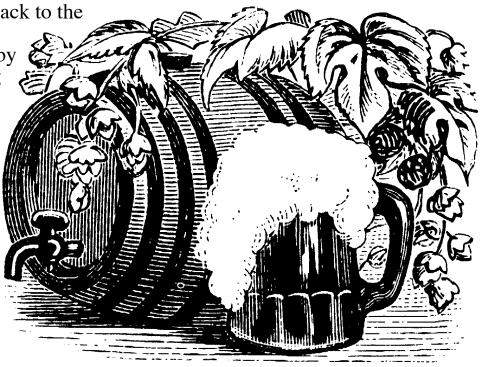
Hops

Refrigerate slightly moistened rhizomes in a plastic bag until planting. Hops prefer full sun and light-textured rich well-drained soil, with a pH of 6.5–8.0. As soon as soil can be worked in spring, till to create a weed-free area. Dig holes about 1' deep and at least 3' apart in rows. Add manure, compost and other slow-release organic fertilizers. Plant 2 rhizomes per hole, horizontally with the buds pointed up and cover with 1–2" of loose soil. The first year the hop plant requires frequent light watering and mulching.

Hops grow vertically, with lateral sidearms extending from the main vine and producing cones. Vines may grow up to 25' in a single season, and do best if they are trained onto strong twine 12–30' high, supported by a trellis, wire, pole, tree branch or south-facing building. When the young vines are about 1' long, select the 2 or 3 most vigorous vines per hill and remove the rest. Gently wrap the vines clockwise onto a string. Once trained, the vine will guide itself.

Pick the hops when they are papery but still slightly sticky and filled with yellow powder. Harvest dates will vary with the variety and climate. Because most hops are produced out of reach from the ground, it is safest to lower the vines in order to pick the hops. Dry hops thoroughly before use. Placed on a window screen in a dry attic, they will dry in a few weeks. Dried hops freeze well.

Cut the vines back to the ground after they have been killed by frost. Each spring apply a hearty topdressing of manure and compost. To help control vigor, prune roots by cutting a 2–3' circle with a shovel around the base of the plant in spring.



***Humulus lupulus* Common Hops** Late summer. Up to 20-30' Not only for brewmeisters, although it has been used for brewing for over 1000 years. Beautiful twining vine covers a trellis, an archway or the entire side of a barn with green lobed leaves, bristly stems, insignificant greenish flowers, followed by the hops themselves: papery aromatic cone-like strobiles that are used medicinally and in beer making. John Christopher recommends the strobile tea as "a powerful, stimulating and relaxing nerve tonic." For brewing, there are basically two types of hops. Aroma hops have lower alpha acids and are used for flavoring, finishing or conditioning brews. Bitter hops have higher alpha acids and are used to impart bitterness. Tolerates shade, adapted to most well-drained soils. Dies back to the ground in fall and rebounds more vigorously each year. Plant it where you want it because it really takes over. No serious pests or diseases. Native to Eurasia. Z3. (5-6" female rhizomes)

***H. l.* Cascade** USDA 19124 [(Fuggle x Serebrianka-Fuggle S) x open-pollinated] Oregon St U, 1972. Fragrantly aromatic hop, low bittering value. Very productive with large cones, ready to harvest mid-late August in central Maine. A customer wrote, "Cascade has gained impeccable renown as *the* charismatic hop in such unsurpassable ales as Anchor's 'Liberty Ale', Sierra Nevada's 'Pale Ale' and McNeill's 'Firehouse Amber Ale'. Nothing 'light' about these." Resistant to downy mildew.

07131 Cascade Hops, bundle of 3, $16.00

***H. l.* Fuggle** Introduced 1875. Traditional Old English hop thought to have been discovered as a chance seedling in 1861. Earthy aroma-type medium-alpha finishing hops used for bittering and aroma in pale ales, porters and stouts. Mild and pleasant, spicy, soft, woody. By the middle of the last century, nearly 80% of British hops were Fuggle. The Slovenian "Styrian (Savinja) Golding" is either the same hop or perhaps a Fuggle selection.

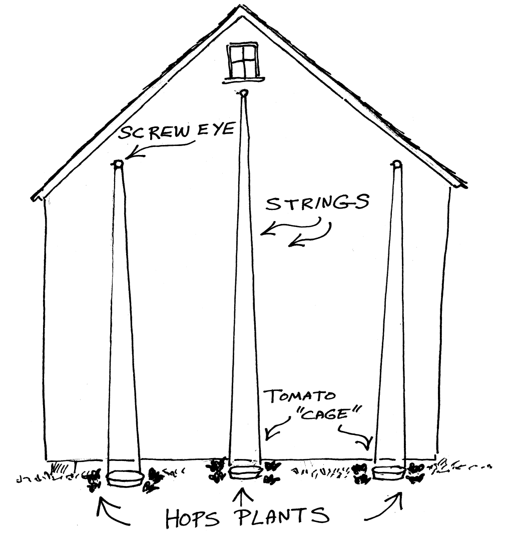
07134 Fuggle Hops, bundle of 3, $16.00

***H. l.* Nugget** (USDA 65009 x USDA 63015M) which is $^{5}/_{8}$ Brewers Gold, $^{1}/_{8}$ Early Green, $^{1}/_{16}$ Canterbury Golding, $^{1}/_{32}$ Bavarian and $^{5}/_{32}$ unknown, Corvallis, OR, 1970. High yielding, high alpha bittering hops for medium to dark ales and lagers. Very popular in IPA. Heavy spicy herbal aroma. Compact cones ripen midseason, late August to early September in central Maine, about two weeks after Cascade. Resistant to downy mildew and verticillium wilt.

07137 Nugget Hops, bundle of 3, $16.00

***H. l.* Willamette** (USDA 21003 x Fuggle Seedling 2-4) USDA, 1976. Excellent all-purpose hops. Old English-style aroma with brewing characteristics similar to Fuggle. Low bittering. Spicy aroma. Good finishing hop for brewing English ales and stout. Vigorous. Higher yielding than Fuggle. Ripens midseason (late summer) and has good disease resistance.

07139 Willamette Hops, bundle of 3, $16.00



The Hops Trellis

Locate your hop bed near your barn, garage, skyscraper or other tall building. Dig a hole about 3' deep in the growing bed for every 4–6 plants. Obtain tomato cages at a garden center. Bury the cage securely in the hole so that only the uppermost hoop is above ground. Tie 2 long rugged strings to the hoop. Then, tie them to a ring, timber, or window sill high above the ground—30 feet if you can do it. Plant 2–3 hops plants on either side of the hoop and train them to grow up the string. By the second year, you should have hops growing to the top. Detach string and lower the vines to the ground when ready to harvest.

Design courtesy of Brad Hunter.

ME Grown = grown in Maine by a member of the Fedco growers coop

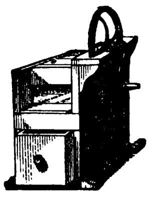
Roots and Stems

Not exactly shrubs. Definitely not trees. These plants can be grown as part of an integrated landscape plan or in beds or plots of their own. This spring we will plant asparagus between apple trees in our newest orchard.

Armoracia rusticana **'Big Top' Horseradish** Exceptionally vigorous perennial with large dock-like leaves and spicy hot roots, savored for centuries for their culinary and medicinal qualities. Horseradish tea is said to be an effective control for brown rot on stone fruit. 'Big Top' is a newer strain with disease resistance. Deep taproot with numerous shallow runner roots. Choose carefully where you plant it because you may never get it all out. Even the tiniest root piece will produce a new plant. Prefers rich soil. Leaves can be cooked as greens. Roots are traditionally harvested in the fall, but you can dig them anytime. Roots keep 3–4 months in the fridge. To use as a stimulant, grate the fresh roots and mix with a little lemon juice or apple cider vinegar and refrigerate. Use soon, then make more. Plant with the slanted cut down and the flat side up, or just toss them in and watch them grow. Native to northern Europe. Z3. (#1 roots)

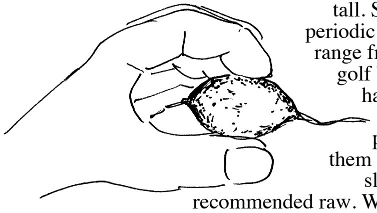
07064 Big Top Horseradish, bundle of 5, $15.00

Horse Radish Grater.



Box pattern; capacity, 15 lbs. an hour. Perforated tin cylinder. Wooden cylinder, studded steel pins.

Apios americana **Groundnut** Nitrogen-fixing leguminous perennial twining vine with edible tubers. Grows to about 5' tall. Stems grow 1–6" deep and have periodic swellings (the groundnuts) that range from marble size to larger than a golf ball. These edible tubers can be harvested at any time of the year. Delicious, high in starch and protein. Peel them first, then eat them boiled, roasted, baked, mashed, sliced, diced or even pureed. Not recommended raw. Will keep a month or more in the fridge or root cellar, or dry them and they keep forever. An essential food for native Americans for hundreds of years; also essential to the survival of the first European settlers in New England. Flowers appear in late August in central Maine. Don't miss them: they are small but rather astonishing. From a distance they look brownish, but up close they are a combination of maroon, pink and violet. 2–4" bean pods. Prefers moist sandy soil. Full to partial sun. Not a fierce or overwhelming grower but does require a trellis of some sort. We have ours growing on birch branches stuck in the ground and then woven together. Establish a patch and let them go. Native to river banks and flood plains, southern Canada, eastern and midwestern U.S. Z3. **ME Grown**.



07070 Groundnut, bundle of 5, $18.00

Asparagus officinalis **'Jersey Supreme' Asparagus** Early. Rutgers U. A spring staple for millennia, asparagus is thought to have originated around the Mediterranean Sea, perhaps in Asia Minor. The pharaohs, Greeks and Romans were all aware of its highly nutritious qualities and delectable flavor. The earliest known American horticultural advertisement, from March 1719, is for "English Sparrow-grass Roots." Jersey Supreme, released in 2000, is an all-male hybrid which is more productive than the older all-male varieties. Occasionally females will show up in a planting. Leave them be or rogue them out as you wish. Excellent tolerance to asparagus rust and fusarium crown rot. Produces high yields of large-diameter tender spears. Z4. (large-rooted 1-yr crowns)

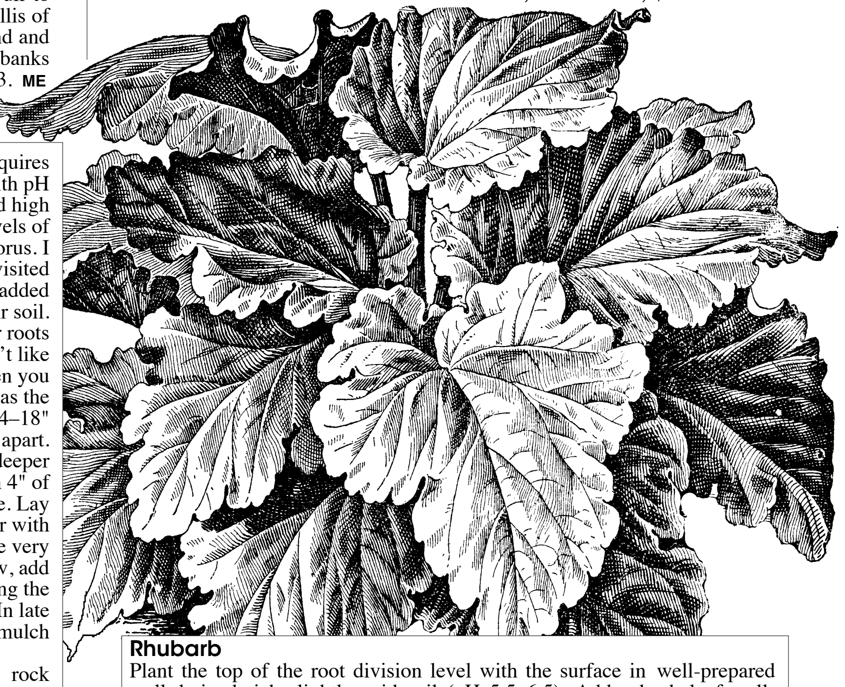
07083 Jersey Supreme Asparagus, bundle of 25, $20.00

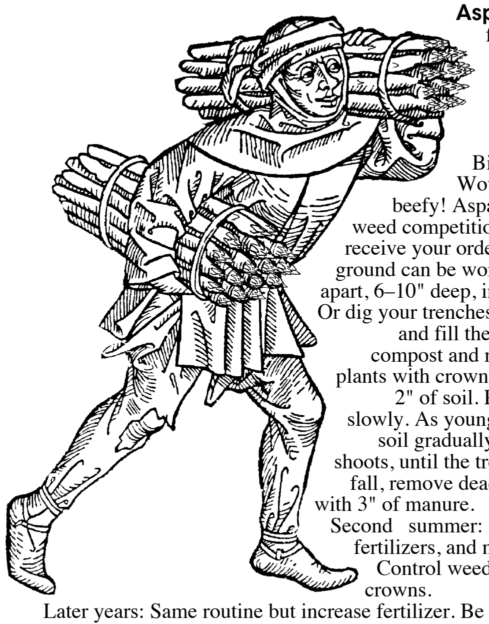
A. o. **'Purple Passion' Asparagus** Early. Developed from the Italian heirloom *Violetto di Albenga*. Brian Benson introduction. Very large deep purple stalk with a creamy white interior. Purple asparagus are actually a type of "white" asparagus shown the light. Sweeter and less stringy than its green counterparts, so you can use more of the spear. Tender enough to eat raw in salads. Turns green when cooked. Z4. (large-rooted 1-yr crowns)

07096 Purple Passion Asparagus, bundle of 25, $20.00

Rheum rhabarbarum **'MacDonald' Rhubarb** MacDonald College, Quebec. Formerly called Turkey Rhubarb. Rhubarb's clumps of juicy acid leaf stalks were once a staple food. The root is a toning and cleansing herb traditionally used every spring for thousands of years. Probably originated in China, it travelled across Asia on the Silk Road to Turkey and then into Europe. Eventually brought to North America through the efforts of Ben Franklin and John Bartram. Famous for pies and wines, but also good for sauces, breads and juices. To make a delicious rhubarb juice: cook up a mess of stalks, then add lemon and/or orange juice and sweetener to taste. Strain through a jelly bag and cool. Serve with ice! Rhubarb-apple sauce is a great way to use up the last of the root cellar apples, and strawberry-rhubarb pie is *the* way to kick off summer. MacDonald has extremely vigorous productive upright large tender stalks, deep red inside and out. Leaves not edible. Z3. (#1 crowns)

07109 MacDonald Rhubarb, bundle of 2, $16.00





Asparagus requires fertile soil with pH 6.8–7.2 and high levels of phosphorus. I recently visited friends who added Biochar to their soil. Wow, were their roots beefy! Asparagus doesn't like weed competition. Plant when you receive your order or as soon as the ground can be worked. Plant 14–18" apart, 6–10" deep, in trenches 4' apart. Or dig your trenches somewhat deeper and fill the bottom with 4" of compost and rotted manure. Lay plants with crown up and cover with 2" of soil. Plants emerge very slowly. As young shoots grow, add soil gradually, just covering the shoots, until the trench is full. In late fall, remove dead stalks and mulch with 3" of manure.

Second summer: Add lime, rock fertilizers, and nitrogen as needed. Control weeds but do not injure crowns.

Later years: Same routine but increase fertilizer. Be sure to leave some spears each year to grow stalks that will support the roots and give you more spears next year. Keep the bed weed-free and mulched heavily.

New research shows that asparagus can be selectively harvested for 2 weeks during the second growing season, for 4 weeks in the third, and a full season thereafter. We recommend caution in harvesting. Before the third or fourth season, only the largest shoots from vigorous plants should be removed, as the young plants need to establish themselves.

Rhubarb

Plant the top of the root division level with the surface in well-prepared well-drained rich slightly acid soil (pH 5.5–6.5). Add a bushel of well-rotted manure or compost under each crown. When plants are established, fertilize liberally with manure and balanced garden fertilizer or compost every spring, as it's a heavy feeder. Harvest for four weeks two years after planting. Thereafter you can harvest for 8–10 weeks each year. Never remove more than $^{2}/_{3}$ of the stalks from a plant.

Every ten years or so, divide plants in early spring, leaving about $^{1}/_{3}$ of the crown in place. Cut up the remainder into fist-sized pieces and replant.

ME Grown = grown in Maine by a member of the Fedco growers coop

The Edible Landscape

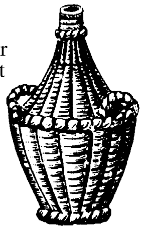
Permaculture, edible landscape, edible forest garden, ecological landscape. What do all these terms mean? Are they scary mysterious things that only high-paid professionals can design and implement? Does this mean that we have to give up lettuce, tomatoes, broccoli, and apples and eat weird plants that don't taste good and do unpleasant things to our digestive systems? We think not!

'Permaculture' was originally Bill Mollison's stab at describing a permanent agriculture, a self-sustaining approach to gardening. These other terms are more or less offshoots of Mollison's work. We've been doing our own version of sustainable landscaping for a very long time and many of you have been doing so as well. Our goal is to create a functional landscape. We want our yard to include a mix of perennial and annual edibles, medicinals, wildlife plantings, ornamentals, shade trees, and even a little…lawn! We want it to blend into the natural landscape beyond. In this drawing you'll see what we've done with our place. Of course it's ever changing. Each year some plants flower and fruit for the first time and others do so for the last time. We feed some and some feed us. Every year the landscape appears anew, unlike it ever has been before. It's a bit like one of those Tibetan Buddhist sand paintings. The spring comes and over the next few months a new painting is created. Fall comes and then the snow and next thing you know the canvas is white and the painting is gone. Then next spring, voilà!

This year we are offering three collections to help you get going. Another option is to read catalogs, explore the countryside, go on garden tours, visit your friends and then create you own.

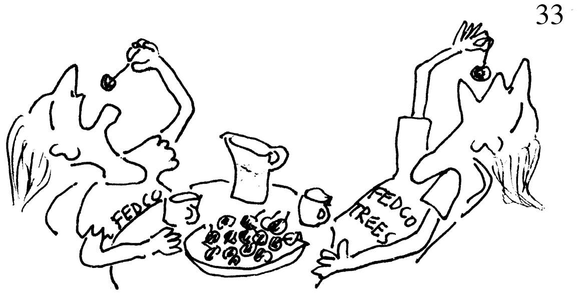
Edible Landscape Collections As we have developed our own farm over the years, some of the plants included in the collections have become personal favorites. Others are newer to us but appear to have great promise for the future of edible landscaping. We plan to offer other collections in years to come.

Country Wine Collection Country Wine typically refers to wine made with ingredients other than grapes. This collection will get you started creating your own garden of unusual wine-producing plants. If you're looking for wine grapes, you'll find them on pages 29–30. For recipes and a great deal of information about country wines, Jack Keller is one of the best online resources. Z4.



2 black chokeberries
2 highbush cranberries
2 elderberries
2 crowns rhubarb
1 thimbleberry
2 staghorn sumacs
1 hibiscus
1 Redfield apple (large red-fleshed fruit, excellent in cider and pies, made famous by West County Cider in Colrain, MA)

03949 Country Wine Collection, $140.00

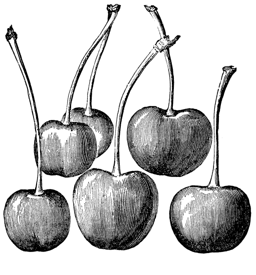


Small Yard Edible Landscape Collection For those who'd like to start an edible landscape but don't have an old pasture, clear-cut woodlot or mountain top to work with. These fifteen plants will set you up. You should be able to fit them in a yard that's less than 1/10 acre. John Bunker's choice of varieties, some of them not offered in the catalog. Z4.

2 dwarf apple trees
3 blueberries
1 table grape
2 dwarf pie cherries
3 honeyberries
2 elderberries
2 large-hipped roses

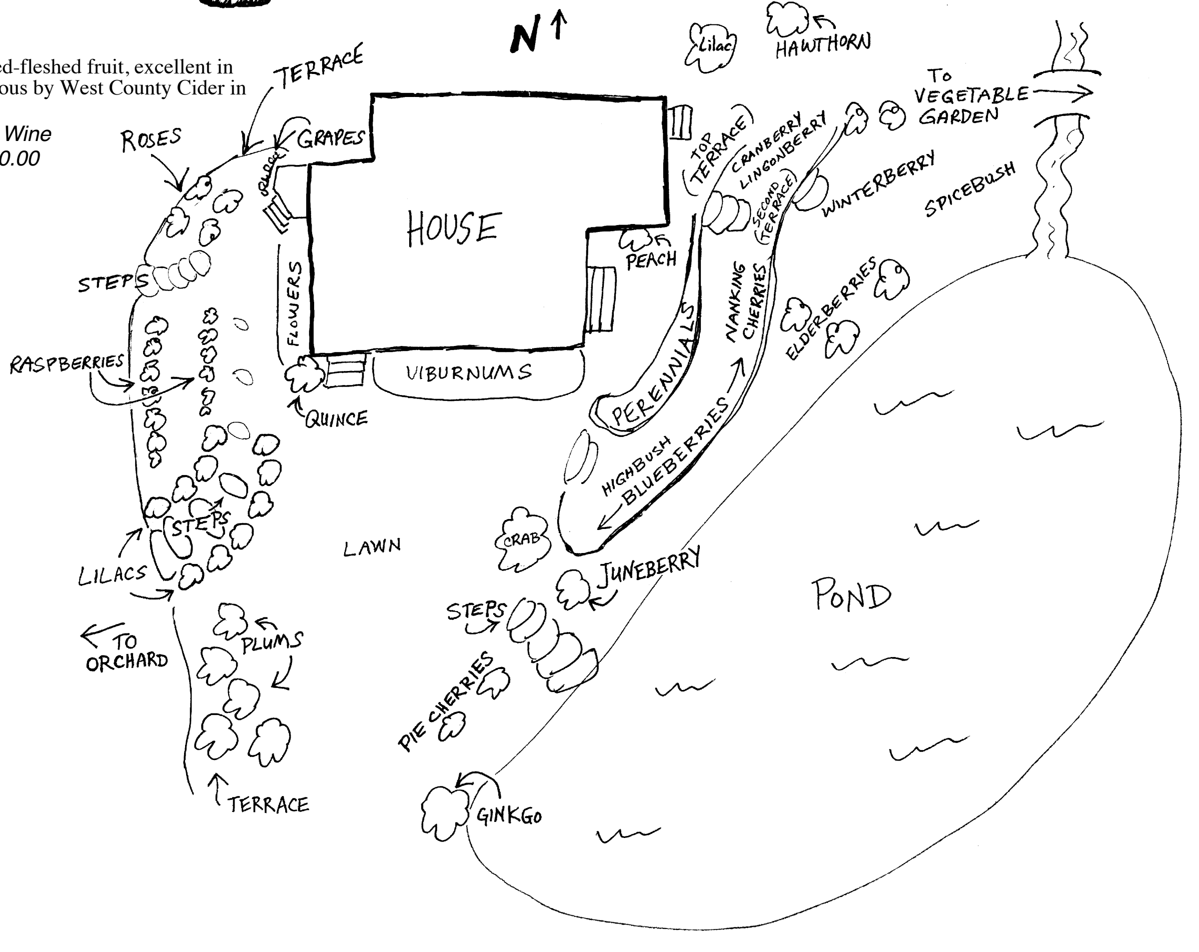
03951 Small Yard Edible Landscape Collection, $200.00

Large Yard Edible Landscape Collection If you'd like to start an edible landscape and do have some space, this collection might be perfect for you. Should fill about 1/4 acre. John Bunker's choice of varieties, some not offered in the catalog. No duplicates of varieties. Z4.



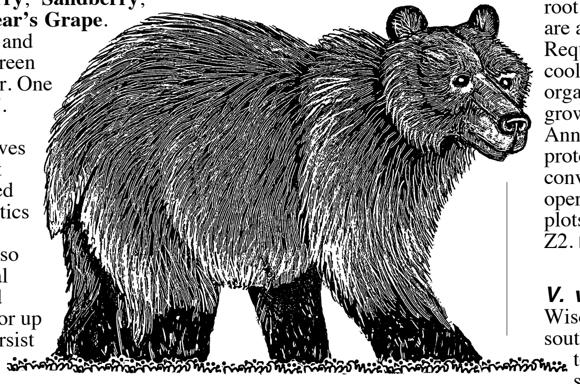
1 pear
2 peaches
5 highbush blueberries
2 kolomikta kiwi
2 juneberries
2 black chokeberries
5 honeylocust
3 honeyberry
2 dwarf pie cherries
3 beach plums
3 nanking cherries
2 elderberries
3 viburnums
2 large-hipped roses

03953 Large Yard Edible Landscape Collection, $400.00



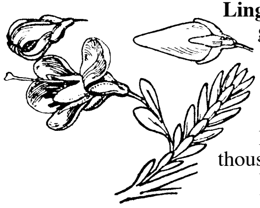
Ground Covers

Diminutive shrubs you might say. These plants spread by root sprouts or by crawling above ground or both. None grows particularly tall. We encourage them to grow around steps, along walls, and as a delightful—and useful—alternative to the dreaded lawn. For another of our favorite ground covers, lowbush blueberry, see page 26. We have also experimented using taller plants as ground covers. Raspberries (p. 27) and roses (p. 42-43) are two favorites.



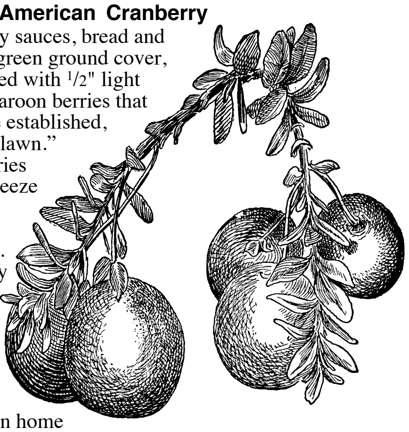
Arctostaphylos uva-ursi **Bearberry** Also called **Kinnikinick**, **Hog Cranberry**, **Mealberry**, **Sandberry**, **Mountain Box**, or **Bear's Grape**. Delicate low-growing and beautiful glossy evergreen spreading groundcover. One plant can spread to 15'. Small pinkish-white flowers in spring. Leaves are diuretic, astringent and anti-bacterial. Used before modern antibiotics in treating urinary infections. Tea may also have value as a general tonic. Small bright red drupe-type berries color up in late summer and persist into winter. Edible but rather dry and mealy (best to leave them for the bears). Prefers poor sandy infertile acid soils, tolerates salt, but is difficult to transplant. Loves the sandy Cape Cod roadsides. Set plants 1–2' apart. No need ever to prune or fertilize. Sun or partial shade. Native to North America and Eurasia. Z2. **ME Grown**. (well-rooted transplants)

06013 Bearberry, $11.00



Calluna vulgaris **'Kerstin' Scotch Heather** 8-12" x 18" Also called **Ling**. Swedish introduction. Evergreen spreading ground cover with mauve-pink flowers in late summer. Small grey-green foliage turns bronze in fall. Magical, mythical and medicinal. Revered in the British Isles since time began. Important medicinally in teas, liniments and ointments. First fermented a few thousand years ago. Used in gruit, in ale, and might be the original ingredient for the first whiskey. Branches used in thatching, bedding, basketry, rope-making, broom-making and even insulation. Flowers attract bees, butterflies and moths. Recommended for groundcovers, rock gardens, and edging paths, or for opening the "portals" to the fairy world. Prefers poor acid soil and full sun to partial shade. Best in mass plantings. Plant about 18" apart each way and let it spread. Mix peat into the soil to lower the pH if necessary (see planting instructions for cranberries and blueberries.) Does not like high fertility or wet spots. Shear every April for best bloom. Native to the dry forests, heaths and bare grounds of Britain and Ireland. More recently naturalized in North America. Z4.

06017 Kerstin Heather, $6.00

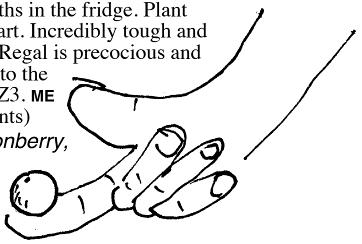


Vaccinium macrocarpon **American Cranberry** This is the cranberry of holiday sauces, bread and jelly. Dense low lustrous evergreen ground cover, reddish purple in fall and loaded with 1/2" light yellow to orange to reddish-maroon berries that color more after harvest. Once established, makes a beautiful and edible "lawn." Handpick or rake like blueberries before hard frost. Use fresh, freeze or store in a cool basement or root cellar for months. Berries are a well-known UTI remedy. Requires acidic soil, preferably cool, moist and high in organic matter, though will grow in dry locations. Annually flooded for frost protection and harvesting convenience in commercial operations, but not necessary in home plots. Native to northeastern U.S. and Canada. 10 plants will fill a 5x5' bed. Z2. **ME Grown**.

06029 American Cranberry, bundle of 10, $20.00

V. vitis-idaea **'Regal' Lingonberry** 7-8" x 36" WI-108. University of Wisconsin-Madison intro, 1994. From open-pollinated seed collected in southwest Finland. Vigorous shallow-rooted spreading groundcover related to blueberries and cranberries. Bright glossy red nutritious fruit is slightly smaller than that of highbush blueberries. Tart until dead ripe, then has excellent flavor, richer and less astringent than cranberries. Can be eaten fresh but primarily used in sauces, jams, syrups, juices and wines. Small shiny dark green foliage. Extremely popular in Scandinavia and now catching on in the U.S. Prefers full sun and poor sandy acid (pH 4.5–5) soils. If you've got good blueberries, try these. Ripens in late summer but is best after a frost. Harvest by hand or with a blueberry rake. Will produce 1–2 lbs per plant. Stores up to 2 months in the fridge. Plant 12–18" apart in rows 3–4' apart. Incredibly tough and very hardy. Self-pollinating. Regal is precocious and moderately vigorous. Native to the colder northern hemisphere. Z3. **ME Grown**. (small 1-year transplants)

06049 Regal Lingonberry, $12.00



American Cranberries are shallow-rooted and require light acid soil (pH 4.0–5.5), preferably cool, moist and high in organic matter, similar to soil in which blueberries grow well. Will grow in dry locations. Though often flooded for frost protection and convenience in commercial operations, flooding is not necessary in home plots. Plant them in spring once the ground can be worked in a bed or in a naturalized setting.

We no longer recommend mixing in sulfur to acidify the soil. Sulfur is slow-acting and can be added to soil surface in subsequent years if necessary. Mixing it into the soil can damage tender young roots.

Instructions for a 5x5′ bed (10 plants):

For acidic "blueberry" soils: If you're fortunate to have a site where blueberries grow naturally, clear a spot of vegetation, cultivate the soil, add some peat and sand if you like, and you're ready to plant.

Sandy soils: Remove soil 10" deep and mix soil with 2 bales of damp peat moss. Replace mixture in bed and cover with 2" of sand.

Clay or silty soils: Remove soil 10" deep and place it around the edge of the bed as a berm. Replace the soil with a 50-50 mix of soil and peat (about 2 bales of peat). Cover with an additional 2" of sand. Plant cranberries 12" apart, so the roots are in the peat and the sand is covering the lower portion of the stems.

Remove all weeds as needed. Water the plants weekly so that the peat is moist but not saturated. Add nitrogen at a rate of 1/3–1 lb (or 20–50 lbs of manure) per 100 sq feet each year. No pesticides should be necessary.

Handpick before first hard frost when berries are red.

In late fall, cover the bed to protect the plants from the drying effect of winter winds. Use a mulch of leaves or pine needles; or cover with polyester row cover and then clear plastic; or cover with row cover and then plenty of leaves. If you use row cover or plastic, you may want to bait for mice under the plastic.

Remove mulch in early April. Protect flower buds from 28° frosts by covering with plastic during frosty nights.

Every two years partially cover the plants with a 1/2–1" layer of sand in spring before growth begins. This will help produce more berries and keep weeds down.

Fedco Trees 2012

PO Box 520 Waterville ME 04903

from mailing label CC- ______________________________

Deliver to:

Farm or Group Name ____

Name ____

US Mail ____

Town ____________________________ St ______ Zip ____________

UPS (include your road name) ____

Town ____________________________ St ______ Zip ____________

phone ____________________________ email ____________________________

Order online
www.fedcoseeds.com
Check product availability.
Download catalogs
and additional order sheets.

Delivery Options ✓ choose one:

- ☐ **Ship** in April. Our last shipment is April 13.
- ☐ **Pickup** at Tree Sale in Clinton. Pay no shipping.
- ☐ **Ship** around May 2. (Add $15 fee to shipping charges.)

Substitutions (see p. 3)	Yes	No
I will accept a similar variety.	☐	☐
I will accept similar rootstock.	☐	☐

* Now Fedco members qualify for a 1% Discount on all purchases, see p. 35 for more information. Take your member discount on the order Subtotal.

Volume Discounts
(only orders received by 1/20/12)

Subtotal over $200	take 10%
over $400	take 15%
over $1000	take 20%

Shipping Charges: (we ship by UPS or Priority Mail, our choice)

	minimum	if your **Adjusted Total** is
New England	$16.00	over $160.00, pay 10% of adjusted total
NY, NJ, & PA	$18.00	over $180.00, pay 10% of adjusted total
All other states	$22.00	over $190.00, pay 12% of adjusted total

Orders to **Alaska** go Priority Mail; be sure we have a *Postal Address*

	minimum	if your **Adjusted Total** is
Priority Mail	$22.00	over $110.00, pay 20% of adjusted total

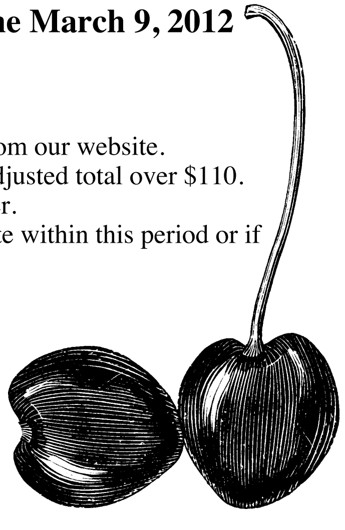
New! Small & Light orders (Item numbers 7000-8800 only)

	minimum	if your **Adjusted Total** is
Small & Light	$8.00	over $80.00, pay 10% of adjusted total

Subtotal from reverse	
Volume Discount	–
* **1% Member Discount**, from Subtotal	–
Adjusted Total	=
ME residents & pickups add 5% **Tax**	+
Shipping	+
Grand Total	=

Make checks payable to **Fedco**

Final order deadline March 9, 2012



- **Complete ordering information on page 3.**
- For early delivery of rootstock or for scionwood, send a SASE for the order form or download it from our website.
- If you require Priority Mail delivery, minimum shipping charge is $22 or 20% for orders with an adjusted total over $110.
- We will add a $10 handling fee if you ask us to make adjustments after we have received your order.
- We ship between April 2 and April 13; we will add a $15 handling fee if you specify a shipping date within this period or if you specify shipment around May 2.
- Consider donating your refund to MOFGA (the Maine Organic Farmers & Gardeners Association.)

☐ Donate *all* my refund to MOFGA ☐ up to $5.00 ☐ up to $2.00

We accept Visa or MasterCard ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Exp. Date ☐☐ ☐☐

Fedco Trees 2012: Trees, Shrubs & Plants

	Item #	Number of pkgs.	Number of plants	Description	Price per package	Total Price
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
					Subtotal (carry to other side)	

If you are ordering more than 28 items, you may copy this page or our format and submit as many pages as you need.

If you ordered *only* item numbers 7000–8800, you qualify for our new reduced shipping rate. See other side for details.

Suggestions:

Fedco Trees 2012

PO Box 520 Waterville ME 04903

FEDCO·TREES

from mailing label CC- ______________________________

Deliver to:

Farm or Group Name ____

Name ____

US Mail ____

Town ______________________________ St ______ Zip ____________

UPS (include your road name) ____

Town ______________________________ St ______ Zip ____________

phone ______________________________ email ______________________________

Order online
www.fedcoseeds.com
Check product availability.
Download catalogs
and additional order sheets.

Delivery Options ✓ choose one:

- ☐ **Ship** in April. Our last shipment is April 13.
- ☐ **Pickup** at Tree Sale in Clinton. Pay no shipping.
- ☐ **Ship** around May 2. (Add $15 fee to shipping charges.)

Substitutions (see p. 3)	Yes	No
I will accept a similar variety.	☐	☐
I will accept similar rootstock.	☐	☐

Volume Discounts
(only orders received by 1/20/12)

Subtotal over $200	take 10%
over $400	take 15%
over $1000	take 20%

* Now Fedco members qualify for a 1% Discount on all purchases, see p. 35 for more information. Take your member discount on the order Subtotal.

Shipping Charges: (we ship by UPS or Priority Mail, our choice)

	minimum	if your **Adjusted Total** is
New England	$16.00	over $160.00, pay 10% of adjusted total
NY, NJ, & PA	$18.00	over $180.00, pay 10% of adjusted total
All other states	$22.00	over $190.00, pay 12% of adjusted total

Orders to **Alaska** go Priority Mail; be sure we have a *Postal Address*

	minimum	if your **Adjusted Total** is
Priority Mail	$22.00	over $110.00, pay 20% of adjusted total

New! Small & Light orders (Item numbers 7000-8800 only)

	minimum	if your **Adjusted Total** is
Small & Light	$8.00	over $80.00, pay 10% of adjusted total

Subtotal from reverse	
Volume Discount	–
* **1% Member Discount**, from Subtotal	–
Adjusted Total	=
ME residents & pickups add 5% **Tax**	+
Shipping	+
Grand Total	=

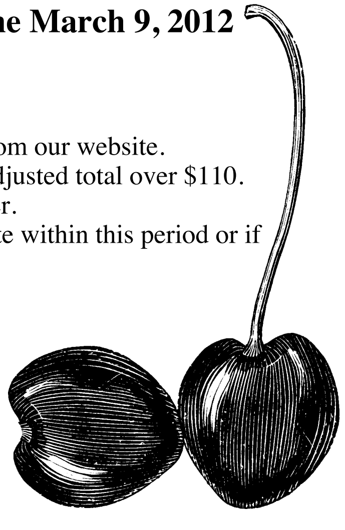
Make checks payable to **Fedco**

Final order deadline March 9, 2012

- **Complete ordering information on page 3.**
- For early delivery of rootstock or for scionwood, send a SASE for the order form or download it from our website.
- If you require Priority Mail delivery, minimum shipping charge is $22 or 20% for orders with an adjusted total over $110.
- We will add a $10 handling fee if you ask us to make adjustments after we have received your order.
- We ship between April 2 and April 13; we will add a $15 handling fee if you specify a shipping date within this period or if you specify shipment around May 2.
- Consider donating your refund to MOFGA (the Maine Organic Farmers & Gardeners Association.)

☐ Donate *all* my refund to MOFGA ☐ up to $5.00 ☐ up to $2.00

We accept Visa or MasterCard ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ Exp. Date ☐☐ ☐☐



Fedco Trees 2012: Trees, Shrubs & Plants

	Item #	**Number of pkgs.**	**Number of plants**	**Description**	**Price per package**	**Total Price**
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						

If you are ordering more than 28 items, you may copy this page or our format and submit as many pages as you need.

Subtotal
(carry to other side)

If you ordered *only* item numbers 7000–8800, you qualify for our new reduced shipping rate. See other side for details.

Suggestions:

Fedco Launches Consumer Membership Drive

FEDCO
FEDCO

In 1985 we organized Fedco as a hybrid consumer/worker cooperative. Even though consumers share 60% of the cooperative's profits each year, we have never campaigned to attract consumer members or required them to pay meaningful equity. This reluctance was mostly a matter of timing: in 1985, both in Massachusetts and Maine, food co-op warehouses had suffered major financial reverses that left them unable to return their members' equity.

Since then, Fedco has enjoyed steady growth. Sales have increased every single year, and each year without exception our cooperative has run in the black. In 2010-2011 we filled more than 33,000 orders, with orders exceeding $4 million for the first time in our history. We have never been financially stronger.

Last February, with Fedco Trees having outgrown the basement in our converted chicken barn warehouse and Moose Tubers way short of sufficient space in the facility we built for it and OGS a scant dozen years ago, we purchased an additional warehouse building down the hill, less than a mile from our present facilities, and next to Interstate 95. This season Fedco Trees is moving into our new space, and our office will move from Waterville to Clinton so that all our operations will be in close proximity. Moose Tubers will use the vacated basement for potatoes. We will hold our annual spring Tree Sale down the hill where we will have more space to display our products and twice the parking capacity.

With the renewed interest in gardening, farming and local food, and our continued emphasis on meeting the needs of our customers and maintaining efficient operations, we believe our future is bright. What better time to launch our first consumer membership drive?

We aim to attract enough consumer members over the next few years, members who will have a real financial stake in the cooperative, to help us finance the estimated $600,000 cost of our new acquisition.

We are asking for a $100 membership equity (if this would be a hardship, there is a $25 low-income option), refundable at any time upon request. Please note that membership is by household (only one membership per household please) or by farm or organization.

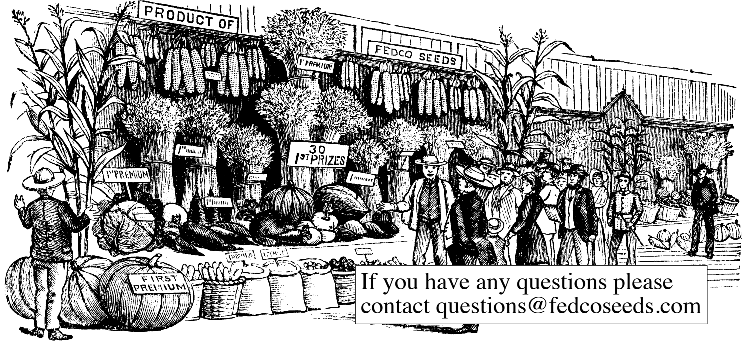
Members will receive several benefits including a 1% discount on all orders from all our divisions, an invitation to our Annual Meeting each September, the opportunity to vote on any proposed bylaw changes, and to vote for and serve on our Board of Directors. Each year some divisions will offer a few varieties that we know will be in very short supply only to members on a first-come, first-served basis. Other benefits are still being planned.

Join as an member-owner of one of the most successful and enduring cooperatives to come out of the new wave.

CR Lawn
President, Fedco Seeds, Inc.

Why Join Fedco as a member?

- Membership = ownership. Own a piece of our new Fedco Trees warehouse and office facility!
- Your membership equity will help finance our new facility, reducing our interest expense.
- Like our products, prices, service and catalogs? Help us to endure and thrive for many more years to come! Keep that humor, those bad puns and occasional rants coming!
- Like our politics around food policy and seed issues? Help us fulfill our mission!
- Enjoy benefits such as a 1% discount on all your orders, and member-only specials!



If you have any questions please contact questions@fedcoseeds.com

Yes, I want to join Fedco as a consumer member-owner!

Enclosed is a check for my refundable membership deposit of $100.
Please make membership certificate out to:

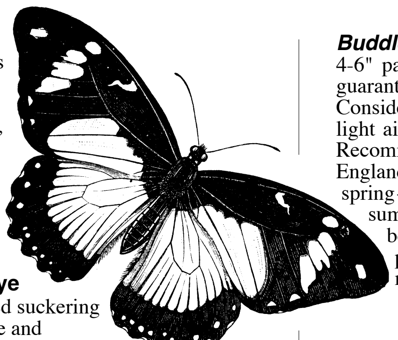
Name____

Address____

City____________________________ St______ Zip__________

Customer # (if you know it)________________________

Email address____



Shrubs span the distance from somewhere near your knees to about as high as you can reach. Some edible, some medicinal and nearly all ornamental. Suitable as single specimens, in hedges and hedge rows, borders, orchards, or blended into the existing natural landscape. Some you can train to be practically as tall as a tree. Or keep them to a manageable height with an occasional snip or two. Some beg for annual pruning while others thrive with neglect.

Aesculus parviflora **Bottlebrush Buckeye** 10-12' x 15' Irregular large wide multi-stemmed suckering shrub with beautiful horse chestnut-like foliage and jaw-dropping midsummer flowers. Will spread over time to create large multi-leveled colonies. Foliage is medium to dark green turning yellow-green in fall and always disease-free. In early summer thin green asparagus-like spears appear across the surface of the colony and then open up into spectacular 10–18" wispy feathery panicles that stand upright above the foliage in a mass. A major show-stopper in and out of bloom. You can grow it in the sun but it will thrive in the shade. Prefers well-drained acid soil. Native to southeastern U.S. Z4. **ME Grown**. (9-12" transplants)

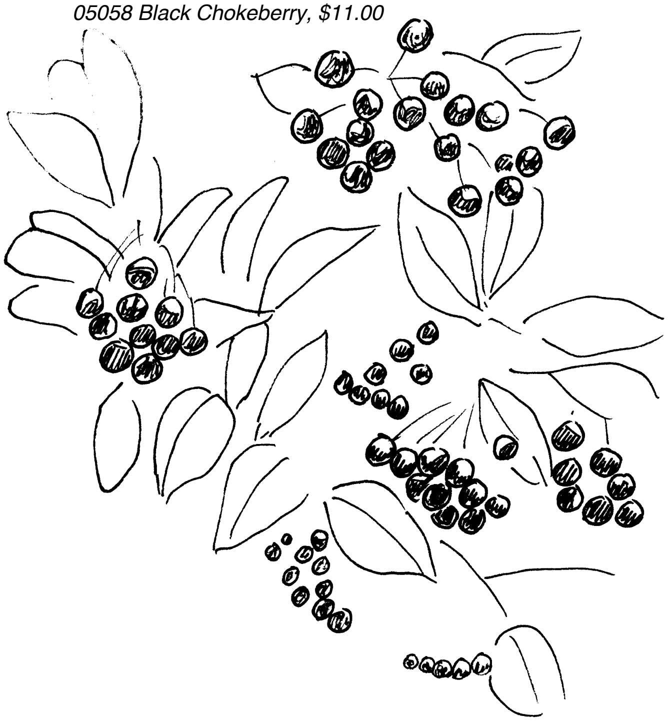
05049 Bottlebrush Buckeye, $16.00

Aronia arbutifolia **'Brilliantissima' Red Chokeberry** 6-10' x 3-5' In his book *Best of the Hardiest,* John Sabuco calls red chokeberry "one of our finest native landscape shrubs." Upright multi-stemmed form. Dense clusters of small but showy white flowers with red stamens. Dark green foliage turns a spectacular crimson in the fall. Increasingly in demand as *the* best alternative to the invasive burning bush. Birds love the abundant persistent glossy bright red fruit. While the fruit may be edible, we recommend that edible landscapes try the black chokeberry (below). Spreads by suckers. Beautiful in masses, plantings and borders. Transplants easily. Adapted to many soils, wet or dry, but prefers moist and well-drained. Sun or partial shade. Can be trained into a small tree. Native to eastern U.S. Z4. **ME Grown**. (12-30" transplants)

05051 Red Chokeberry, $11.00

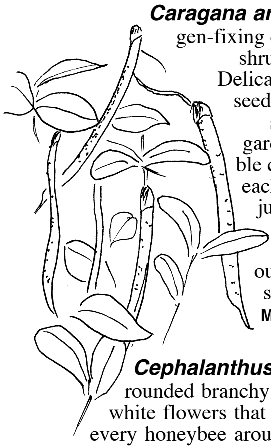
A. melanocarpa **Black Chokeberry** 4-6' x same. Often called **Aronia** to avoid using its unfortunate common name. Compact rounded native shrub with edible blueberry-sized fruit, has recently received lots of attention for its extremely high levels of antioxidants. Thousands of acres are being planted, especially in the Midwest. While fruit is barely palatable fresh, the flavor improves considerably when dried, juiced or cooked. Here's one method of extracting the juice: mash up berries and water (one quart per gallon of berries) but do not cook. Transfer mixture to a jelly bag and wring it out and wring it out and wring it out some more. Give the pulp (and most of the astringency) to the chickens. Drink the juice straight or diluted, or make wine, jelly, tarts, even pilaf. Not particularly picky about where it grows. Will sucker over time and form colonies. Adaptable to wet or dry areas, sun or partial shade. Free of diseases and insects. Like the red chokeberry, with its ornamental bright-red fall foliage, it's an excellent alternative to the highly invasive burning bush. Native to eastern U.S. Z3/4. **ME Grown**. (12-30" transplants)

05058 Black Chokeberry, $11.00



Buddleia **'Black Knight' Butterfly Bush** 4' x same. Arching shrub with 4-6" panicles of very dark purple fragrant flowers in midsummer that are guaranteed to attract zillions of butterflies, bees and hummingbirds. Considered the darkest of all the buddleias. Also one of the shortest, with a light airy habit. Reblooms throughout the summer if spent flowers are cut. Recommended for shrub or perennial borders. Grey-green foliage. In New England treat it as an herbaceous perennial. Cut it to the ground in early spring—or just let it die back—and it will bloom again on new wood come summer. Very adaptable but begs for full sun. Easy to transplant. Can become a nuisance in southern states, but that shouldn't ever be a problem up here. Usually considered to be a Zone 5 plant though it may do well in Zone 4. (well-rooted crowns)

05066 Black Knight Butterfly Bush, $12.00

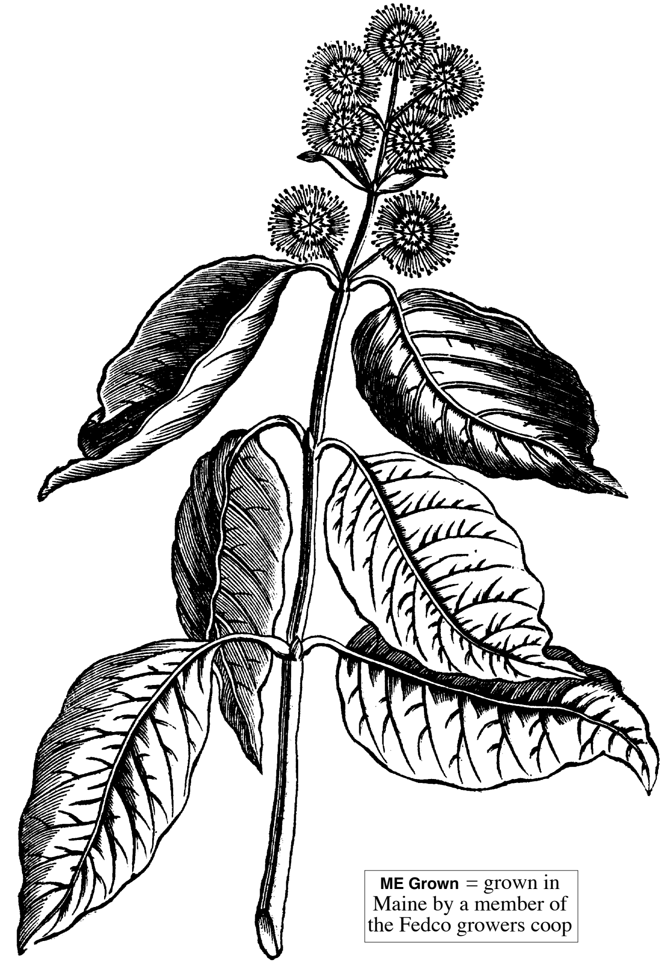


Caragana arborescens **Siberian Peashrub** 15-20' Nitrogen-fixing cheerful bright green upright multi-stemmed oval shrub well-suited to windbreaks, hedges and borders. Delicate yellow flowers in spring are followed by small seed pods that turn a golden yellow. The pods and the small "peas" are edible. Eaten raw, they taste like garden peas, though not as sweet. Makes an acceptable chicken feed. Silvery bark and compound foliage, each with 8–12 small obovate leaflets. Easy to grow; just put them in and let them go. Adaptable to poor soils, drought, salt. Full sun. Maintenance free. Occasionally rumored to be invasive, although ours have stayed put for 20 years and not spread by seed or root. Native to Siberia and Manchuria. Z3. **ME Grown**. (10-48" transplants)

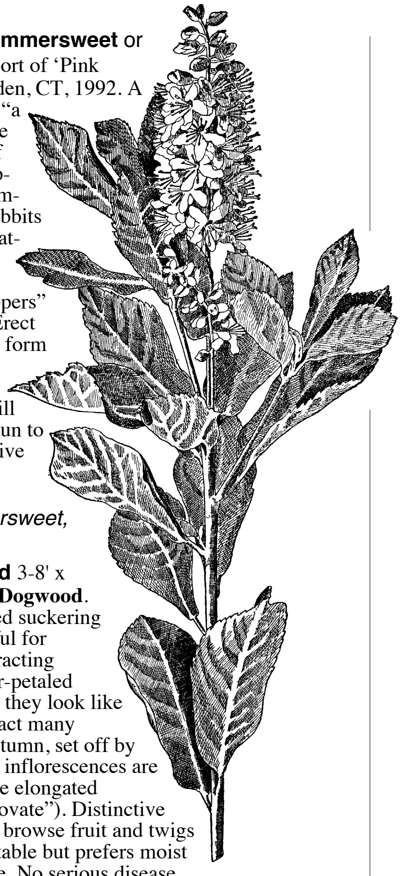
05081 Siberian Peashrub, $10.00

Cephalanthus occidentalis **Buttonbush** 6-10' x 8' Loose rounded branchy shrub with masses of unusual spherical fragrant white flowers that appear for 4–6 weeks in summer—a magnet for every honeybee around. These highly ornamental blooms the size of Ping-Pong balls also do well in dried flower arrangements. The seeds (nutlets) make good duck fodder in the fall. Bright green foliage. Often found in masses along the shores of New England's rivers and ponds but also suitable for the garden. Last summer I visited a single specimen in a yard nearby. It was thriving and looked great. Prefers moist soils. Recommended for naturalizing. Native to eastern U.S, west to New Mexico. Z4. **ME Grown**. (1-3' transplants)

05088 Buttonbush, $11.00



ME Grown = grown in Maine by a member of the Fedco growers coop



Clethra alnifolia **'Ruby Spice' Summersweet** or **Sweet Pepperbush** 4-5' x same. Sport of 'Pink Spires', Broken Arrow Nursery, Hamden, CT, 1992. A *New York Times* article called Clethra "a plant that sounds almost too good to be true." Red buds and beautiful spires of heavenly scented deep pink flowers appear on racemes for 6 weeks in midsummer. Bees and butterflies love it but rabbits and deer do not. Whorls of extremely attractive finely serrated distinctly veined dark green foliage turn deep gold in fall. Dangling racemes of "peppers" persist into the next growing season. Erect rounded-oval habit, often suckering to form dense colonies. Slow growing. Prefers acid moist well-drained soils. A good shrub to border streams and ponds. Will tolerate salty coastal conditions. Full sun to shade. Pest free and easy to grow. Native from Maine to Florida. Z3. **ME Grown**. (10-24")

05103 Ruby Spice Summersweet, $10.00

Cornus racemosa **Grey Dogwood** 3-8' x 10-15' Also called **Northern Swamp Dogwood**. Native multi-stemmed thickly branched suckering shrub. Forms colonies over time. Useful for windbreaks, riparian plantings and attracting wildlife. Rounded domes of small four-petaled white flowers bloom in early summer; they look like small hydrangea panicles and will attract many pollinators. White berries appear in autumn, set off by bright red fruit stalks. "Spent" pinkish inflorescences are particularly attractive in winter. Simple elongated medium-green foliage ("lanceolate to ovate"). Distinctive grey bark. Deer, rabbits and birds will browse fruit and twigs and hide out in the dense cover. Adaptable but prefers moist well-drained soils. Sun or partial shade. No serious disease problems. Native to eastern U.S. and southern Canada. Z4. **ME Grown**.

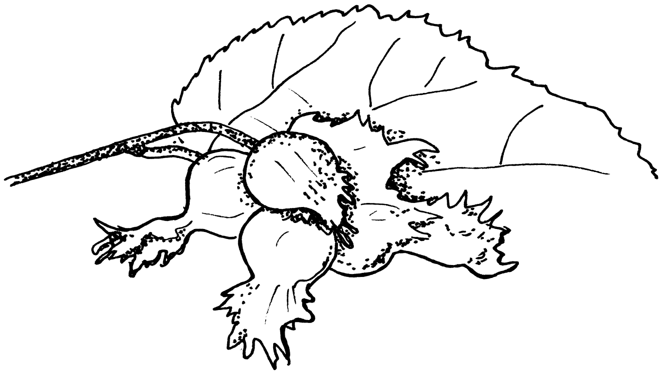
05113 Grey Dogwood, $14.00

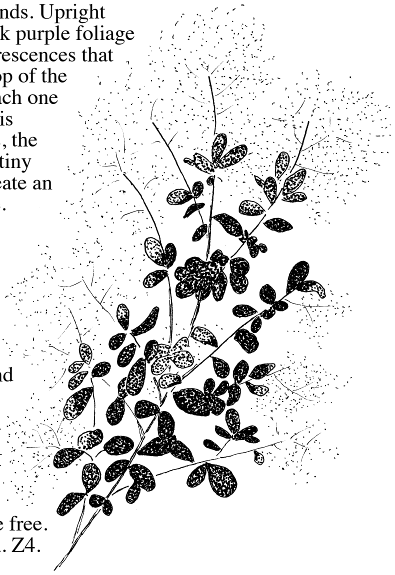
C. rugosa **Round-leaved Dogwood** 6-10' x 6-12' Sometimes called ***C. circinata***. Native shrub or small tree almost never found in the nursery trade. Beautiful showy small creamy-white flowers in flat spreading clusters in late spring. Used in homeopathic remedies. Large rounded abruptly pointed leaves. Young branch stems are green, warty and blotched with purple. Light blue berry-like fruit in late summer. Red, purple and orange fall color. Red winter bark. Birds love the berries. Prefers partial shade, moist or dry, sandy, gravelly or rocky soil. Sometimes grows where there seems to be no soil at all. Will absolutely thrive in average garden soils. Native to northeastern and midwestern U.S. and Canada. Z3. **ME Grown**.

05116 Round-leaved Dogwood, $14.00

Corylus americana **American Hazelnut** or **American Filbert** 15-18' x 10-15' Suckering multi-stemmed rounded shrub or small tree with very good $^1/_2$" nuts. Somewhat smaller but much hardier than the various foreign hybrids—hazelberts, filazels, etc. This is not our local wild Beaked Filbert, which is smaller and prickly to handle. Squirrels and bluejays will begin stealing the nuts as soon as they're ripe, so pay attention and harvest the crop as soon as the husks begin to turn brown and lose their sticky yellowness. In central Maine that's around the third week of September. Cure nuts in their husks for a couple of weeks and then shell them. You can even stomp off the dry shells in a big tub as if you were juicing grapes. Showy catkins in spring and dark green serrated foliage. Prefers well-drained soils, but is pH adaptable. Full sun or light shade. Annually cutting out some suckers will keep your stand from becoming too shrubby. Native to eastern North America. **Highly resistant or immune to filbert blight.** Plant 8' apart. Z4. (20-36" transplants)

05133 American Hazelnut, $14.00



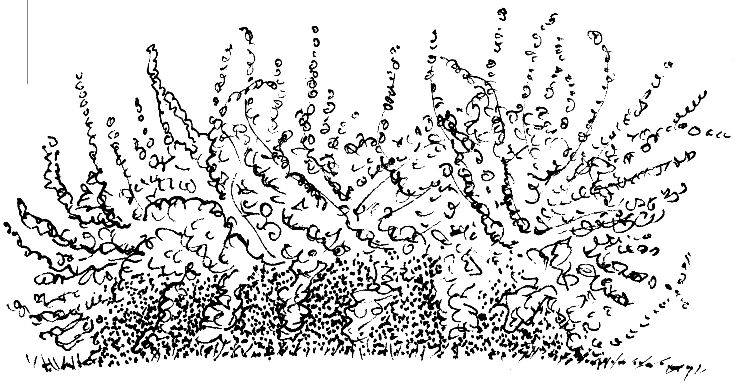


Cotinus coggygria **'Royal Purple' Smokebush** 8-10' x same. Boskoop, Netherlands. Upright spreading shrub with velvety dark purple foliage and amazing purplish-pink inflorescences that look like large smoke puffs on top of the branches throughout summer. Each one of these cotton candy-like poofs is composed of a web of fine stems, the smallest of which are lined with tiny hairs that reflect the light and create an ethereal effect. Quite remarkable. For maximum glow, plant where the sun will shine right through each luminescent leaf. Red-burgundy fall color. Often considered a Zone 5 plant, but reliably grows back and flowers each summer in Zone 4. Some say to cut it to the ground each fall for more vigorous and more brightly colored growth. We leave ours to come back on its own. So far it hasn't let us down. Adaptable to a wide range of pH and soils although it prefers it well-drained. Disease free. Native southern Europe to China. Z4. (9-12")

05163 Royal Purple Smokebush, $12.00

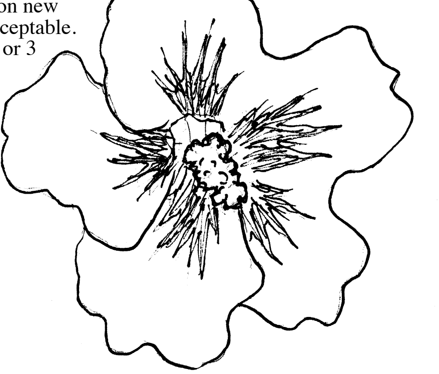
Forsythia* x *ovata **'Northern Gold' Forsythia** 6-8' x 5-7' Ottawa, Canada, 1979. If your forsythia blooms only from the snow-line down, you've been duped. Don't buy cheap big-box forsythia. Northern Gold has not only the outstanding bud hardiness necessary for flower production *above* the snow line, but also outstanding golden-yellow flowers. You can have a full bloom every year! Upright form with yellow-grey branches clad in healthy rich green foliage. Prefers moderately fertile, slightly acid to neutral soils with good drainage. One of the first to flower in spring. Makes an outstanding hedge. Bred from *F. ovata*, a hardy dependably blooming Korean species. Z3. (9-18")

05196 Northern Gold Forsythia, $12.00

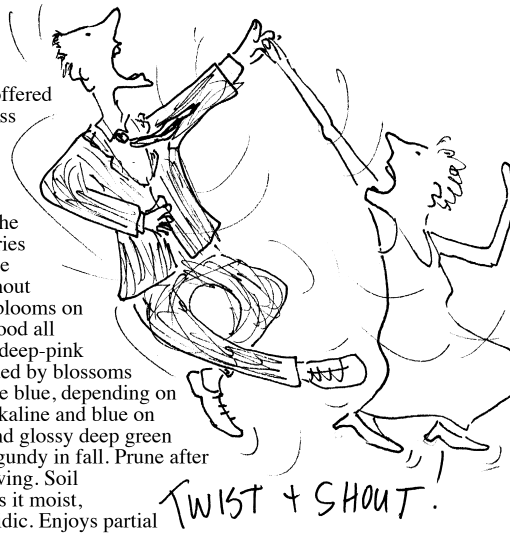


Hibiscus syriacus **'Red Heart' Rose of Sharon** 8-15' x 6-10' Also called **Shrub Althea** and **Rose Althea**. Upright shrub with large beautiful single white flowers, each with a very prominant red "eye." Blooms from early summer until fall. The genus has a long history of medicinal, edible and ornamental use. Leaves, flowers, bark and roots all used medicinally. Hibiscus flowers and leaves are edible raw or cooked. Combined with rose hips or other dried fruit, the cooling and detoxifying petals make a pleasant tea. Roots are also edible. Plant in groups, borders or as a specimen. Soil adaptable but prefers moist and well drained, slightly acidic to slightly alkaline. Full sun to partial shade. Considered a Zone 5 plant, though flowers bloom on new growth so some dieback is acceptable. Prune young plants back to 2 or 3 buds. Thereafter, no major pruning is necessary except to remove oldest wood now and then. Native to Asia, introduced to Europe by 1600. Z5.

05207 Rose of Sharon, $12.00



Hydrangea macrophylla **'Twist and Shout' Hydrangea** 3-5' x same. ('Penny Mac' x 'Lady in Red') Michael Dirr Introduction, U of GA, 2009. Having offered the "original" Endless Summer hydrangea for several years, we decided to offer one of the newer introductions from the Endless Summer series this year. As with the others, Twist and Shout produces abundant blooms on both old and new wood all summer long. Lacy deep-pink centers are surrounded by blossoms of pink or periwinkle blue, depending on soil type. Pink on alkaline and blue on acidic. Red stems and glossy deep green foliage turn red-burgundy in fall. Prune after flowering. Fast growing. Soil adaptable but prefers it moist, well-drained and acidic. Enjoys partial shade, especially in the afternoon. Loves mulch. Highly tolerant of urban conditions. Species native to Japan. Z4.


TWIST + SHOUT.

05232 Twist and Shout Hydrangea, $16.00

Ilex verticillata **Winterberry** Also called **Black Alder**, **Fever Bush**, **Possumhaw**, **Swamp Holly** and more. A staple of the Maine landscape. Deciduous suckering medicinal holly with clusters of upright stems. One of the few berry plants that grows even in dry shady spots. Lustrous deep green leaves retain their color long after they're cut for decoration. Richly foliated, but open enough to display its interesting branching structure. Best known for profusions of bright red $^{3}/_{8}$" berries which stand out after the leaves fall—they keep their color all winter, looking spectacular against the snow. Excellent fall wildlife forage plant. Leaves used for tea and tonic, astringent bark used in herbal medicine. Some sources suggest that the berries were used medicinally in the past, others say absolutely not. Tolerates dry conditions but prefers moist or wet acidic soil, even standing water. Sun or partial shade. No serious pests or diseases. Male and female plants required for fruit. Plant males within 30' of females. Native from midwestern to eastern U.S. Z4.

I. v. **'Red Sprite'** 3-5' x 4-8' Female plant. USDA introduction. Smaller plant than the straight species with an attractive low loose rounded form. Winner of the 1998 Cary Award for Distinctive Plants for New England. 'Jim Dandy' male required for fruit. **ME Grown**. (4-6" transplants)

05247 Red Sprite Female Winterberry, $12.00

I. v. **'Jim Dandy'** 3-6' x 4-5' Male selection to pollinate 'Red Sprite' winterberry. One will pollinate several females. **ME Grown**. (9-12" transplants)

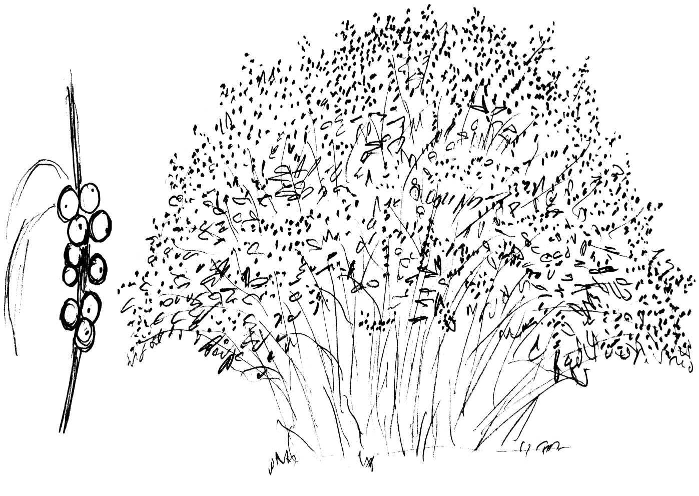
05249 Jim Dandy Male Winterberry, $12.00

I. v. **'Winter Red'** 9x8' Female plant. Considerably larger than 'Red Sprite'. Darker green foliage. Winner of the 1995 Styer Award. 'Southern Gentleman' male required for fruit. **ME Grown**. (12-16")

05251 Winter Red Female Winterberry, $12.00

I. v. **'Southern Gentleman'** 6x6' Male selection to pollinate 'Winter Red' winterberry. Don't be deceived by the name—it's hardy. One will pollinate several females. **ME Grown**. (9-16" transplants)

05253 Southern Gentleman Male Winterberry, $12.00



Pruning Directions for Ornamental Shrubs, Trees and Berries

Proper pruning enhances the beauty and usefulness of flowering shrubs and trees. Trim shrubs for large blooms, fine foliage and good form.

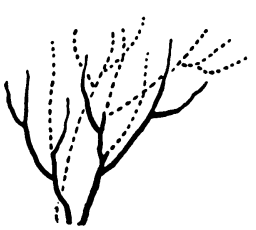
Why Pruning Is Necessary

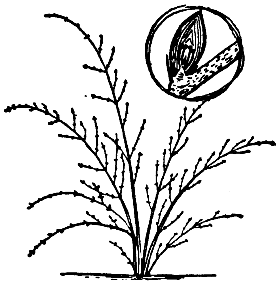
- Most shrubs need a few of the older canes cut off at the ground line each year to encourage the growth of new canes. This is a natural rejuvenation procedure replacing old canes with new.
- Pruning produces larger and better blooms as the vitality of the plant goes to the blossoms, rather than to supporting heavy wood growth.
- Remove poorly shaped longer branches to retain the natural shape of the shrub.
- Remove broken, dead or diseased branches for health, neatness and vigor.
- Shrubs with unusual bark coloring should have the older canes removed, as the full natural coloring is displayed best in the new growth.
- Certain varieties of shrubs sucker from the roots. Remove these suckers unless you want the shrub to spread and form colonies.

Pruning shrubs is primarily thinning out older undesirable canes. Plants such as hydrangeas, altheas, tea roses, tamarix and dogwoods should have all canes pruned back to produce larger flowers or more brightly colored canes.

The form of a tree may be controlled by pruning. If you desire a tall tree with a high crown, prune the lateral branches from the trunk and prevent formation of low crotches. For a low, stocky tree used in screens and windbreaks, cut back the top shoots to force side growth.

Remove oldest wood and center branches (a few each year).



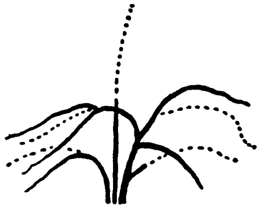


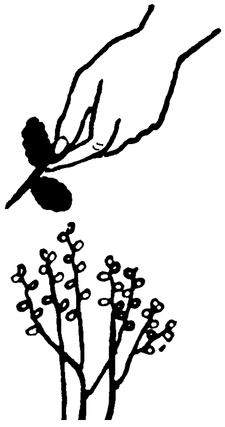
Prune Late-Flowering Shrubs Early

Midsummer-flowering shrubs form flower buds on new wood. For maximum bloom, prune them in early spring before the new wood begins to grow.

Prune Early-Flowering Shrubs Later Spring-flowering shrubs form flower buds in the summer after they are finished blooming. For maximum bloom the following year, prune them immediately after their bloom is over.

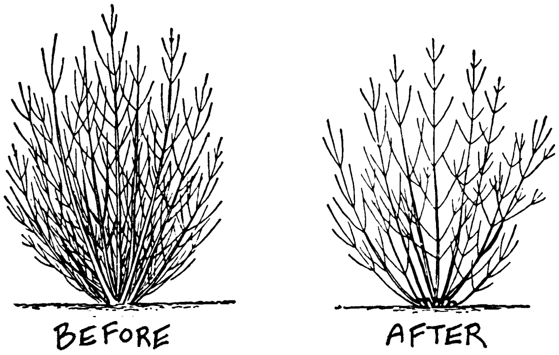
Retain natural arching habit by pruning branches after flowering. Otherwise new growth starts at the tips of flowering branches and the shrub gets top-heavy.





Pinch off the growing tips and remove flowers as soon as faded.

Prune For Healthy Growth

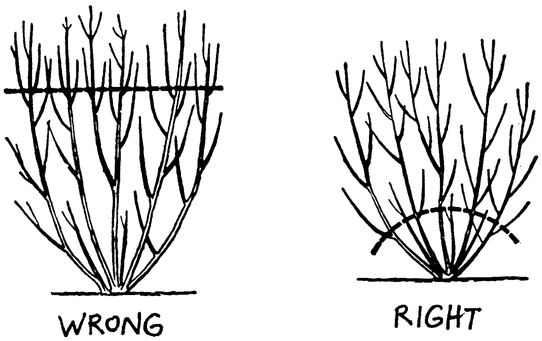


Before

Your shrubs will tell you when they need thinning. Shrubs such as honeysuckle send up too many canes for optimal growth. Cut off a few of the oldest and least vigorous branches close to the ground. Do not injure the bark on canes to be saved.

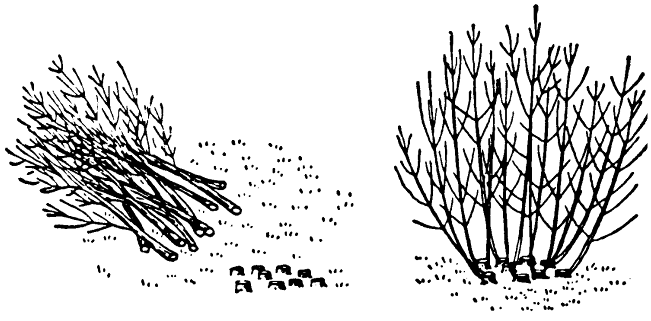
After

Note the difference thinning of canes makes. Air and light can now penetrate. Fewer canes promote vigor, health and vitality. Plants will produce more and larger blossoms. Slow growing, less vigorous shrubs seldom need thinning out.



Prune For Symmetry and Appearance

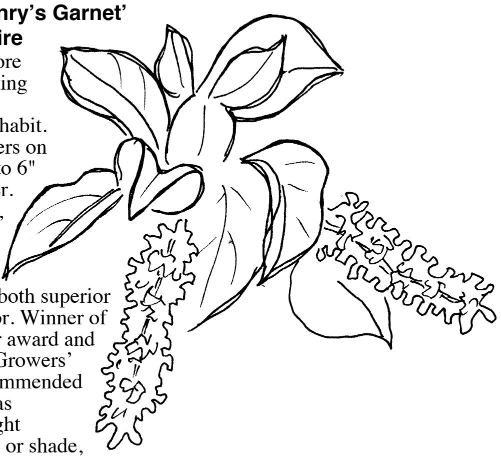
Cutting back shrubs straight across the top is a common error. This encourages top-growth and the lower part of the shrub, with no foliage near the base, becomes woody and unsightly. Growth stays low and bushy when properly pruned. Proper pruning promotes growth at the base of the shrub.



What To Do with Overgrown Shrubs

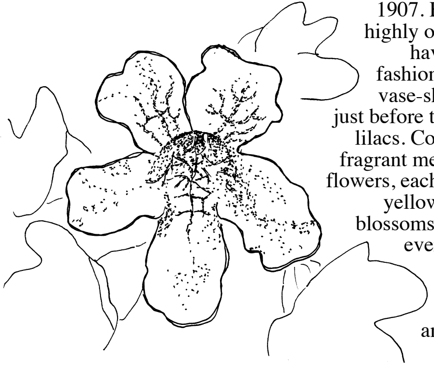
Overgrown shrubs with little foliage near the base may be rejuvenated by cutting canes down to the ground in early March, even though early blooms may be sacrificed that year.

Shrubs cut back for rejuvenation will send forth new shoots in late spring. This growth will be bushy with foliage clear to the ground. Pinch off tops when the desired height is attained. It usually takes two to three years to rejuvenate shrubs and hedges completely.



***Itea virginica* 'Henry's Garnet'**
Virginia Sweetspire
3-5' x 5-6' Swarthmore College, PA. Spreading shrub with an erect clustered branching habit. Fragrant white flowers on upright racemes up to 6" long in early summer. Bright green foliage, brilliant reddish-purple fall color. Will form colonies. Henry's Garnet has both superior flowers and fall color. Winner of the prestigious Styer award and the 1999 Michigan Growers' Choice award. Recommended for moist or wet areas although quite drought tolerant as well. Sun or shade, pH adaptable. Species native to eastern U.S. Z4. **ME Grown**. (10-12" transplants)

05255 Henry's Garnet Sweetspire, $12.00

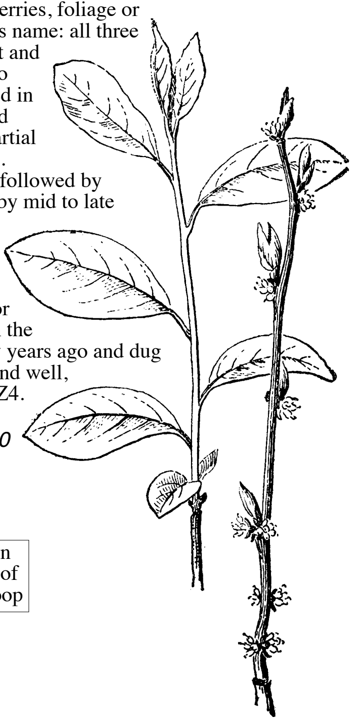


***Kolkwitzia amabilis* Beautybush** 6-10' x 6-8' Collected by EH Wilson, Yichang, Hubei, China, 1901. Introduced 1907. Fast-growing multi-stemmed highly ornamental shrub that likes to have plenty of room for its old-fashioned slightly unkempt arching vase-shaped form. Blooms in June, just before the mockorange and after the lilacs. Completely covered with small fragrant medium-pink 5-petaled tubular flowers, each throat etched with a web of yellow-orange veins and dots. The blossoms appear on the side shoots of every stem, up to 20 per cluster. There are literally thousands on a mature specimen. While the overall appearance is pink, the orange throat enriches the color. Matte bluish-green slightly rugose foliage. Brown and grey exfoliating bark. Yellow and red fall color. Can also be pruned to a small 3–7 trunk tree. Flowers can be forced indoors in spring. Prune after flowering, removing the oldest branches back to the ground. Excellent as a specimen or background shrub for short-statured plantings. Easy to grow in any type of soil. Prefers full sun. No serious pests or disease. Native to central China. Z4. **ME Grown**. (28-36")

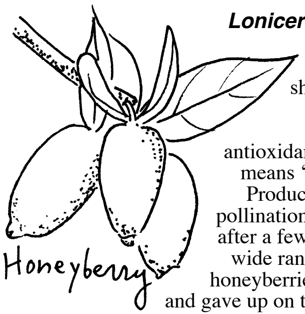
05270 Beautybush, $10.00

***Lindera benzoin* Spicebush** 6-12' x 8-12' Large rounded multi-stemmed native shrub suited to naturalizing in moist or wet areas, singly or in groups. Edible and medicinal. Scratch the berries, foliage or stems and you'll know how it got its name: all three have a delicious lemony-spicy scent and can be used as a native alternative to allspice. Leaves, twigs and fruit used in teas. Will also attract bees, birds and butterflies. Often found in full or partial shade, but at its showiest in full sun. Soft-yellow flowers early in spring followed by small clusters of glossy red berries by mid to late summer. Blue-green foliage turns golden yellow in fall. Male and female plants required for fruit. These are unsexed seedlings. Prefers moist well-drained neutral or slightly acidic soils. Be patient with the plants. I thought one had died a few years ago and dug it up, only to find that it was alive and well, ready to go. Native to eastern U.S. Z4. (9-12" transplants)

05287 Spicebush, $12.00



ME Grown = grown in
Maine by a member of
the Fedco growers coop



***Lonicera caerulea* Honeyberry** 5-6' x 4-5' Also called **Haskap** or **Edible Honeysuckle**. Extremely hardy, medium-sized fruiting shrub. Somewhat similar in bush and fruit to our native highbush blueberry. Small oval fruit is dark blue, tart and very high in antioxidants. In the Japanese Ainu language, *haskap* means 'lots of little things on top of the branches.' Productive plants bear at a young age with proper pollination. Ten pounds of fruit per plant is possible after a few years. Will do well in most soils and in a wide range of soil pH (5.0–8.5). Years ago we tried honeyberries on our farm. We never got much fruit and gave up on them. That may have been because early plant material was from Russia and flowered too early for our northern New England climate. Recently developed varieties use Japanese material which seems to have better success fruiting here in the States. We've got all three of these varieties on trial now in central Maine and are pleased so far. Extremely hardy. Z2.

***L. c.* var. *kamtschatica* 'Berry Blue'** 8x8' Summer. Recommended pollinator for Borealis and Tundra honeyberries. One Berry Blue will pollinate about 8 others. Small tart berries may need sweetening depending on your tastes.

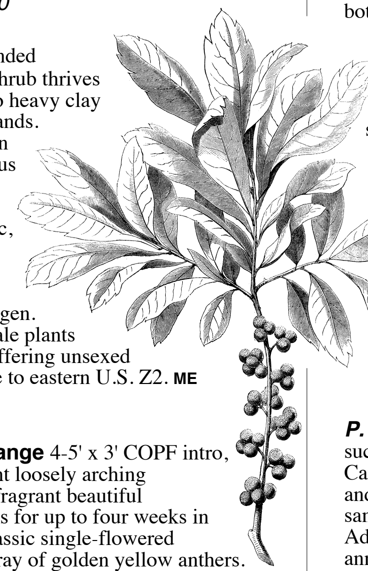
05292 Berry Blue Honeyberry, $16.00

***L. c.* 'Borealis'** Summer. U of Saskatchewan 2007 introduction. The best-tasting and largest fruit in the Saskatchewan breeding program. Delicate fruit, not as firm as Tundra. Recommended for home gardeners. Needs Berry Blue as a pollinator.

05294 Borealis Honeyberry, $16.00

***L. c.* 'Tundra'** Summer. U of Saskatchewan '07 intro. Large high-quality fruit is tangy and sweet, shaped in a long flat oval. Firmer and somewhat sweeter than Borealis. Needs Berry Blue as a pollinator.

05296 Tundra Honeyberry, $16.00

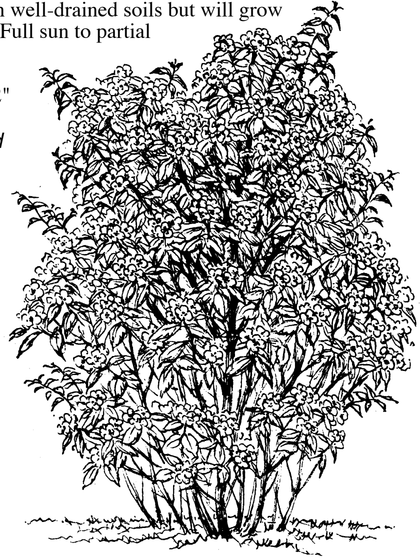


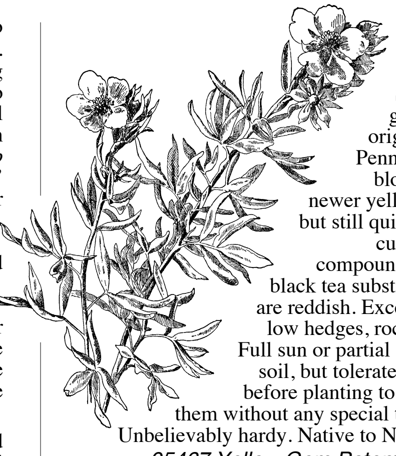
***Myrica pensylvanica* Bayberry** 5-9' Rounded deciduous semi-evergreen very salt-tolerant shrub thrives in full sun to partial shade, sandy poor soils to heavy clay soils. A common sight on Maine's coastal islands. Rubbing the glossy deep green leaves between your fingers produces one of the most delicious smells in the world. Leaf and root teas are medicinal. Small greyish-blue waxy berries produced on female plants are highly aromatic, historically used for making candles. Plants feed numerous wildlife species and are especially craved by swallows. Excellent in masses or hedges, tends to sucker. Fixes nitrogen. Tends toward being dioecious: male and female plants required for good fruit development. We're offering unsexed plants; plant several if you desire fruit. Native to eastern U.S. Z2. **ME Grown**. (12-24" transplants)

05312 Bayberry, $14.00

***Philadelphus lewisii* 'Blizzard' Mockorange** 4-5' x 3' COPF intro, Alberta, Canada. Medium-sized coarse upright loosely arching ornamental blooming shrub. A "blizzard" of fragrant beautiful pure-white slightly cupped 4-petaled blossoms for up to four weeks in late spring, after the lilacs fade. This is the classic single-flowered mockorange. Each flower is accented by a spray of golden yellow anthers. The contrast of the flowers and deep dark blue-green foliage is lovely. Prefers moist rich well-drained soils but will grow well in most conditions. Full sun to partial shade. Prune after flowering. Native to western Asia. Z3. (18-32" robust, multi branched)

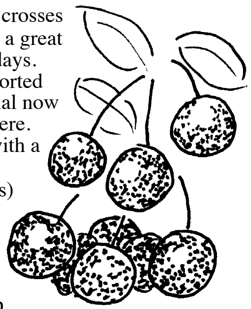
05322 Blizzard Mockorange, $14.00





***Potentilla fruticosa* 'Yellow Gem' Potentilla** 20"x48" UBC Botanic Garden intro Canada. Also called **Shrubby Cinquefoil** or **Widdy**. A low-growing yellow-flowering potentilla that originated in the mountains of the Olympic Penninsula. Showy yellow 5-petaled flowers bloom from late spring to frost. One of the newer yellows, they're not as loud as the brightest but still quite yellow. Larger flower size than many cultivars. Very small attractive grey-green compound leaves can be used medicinally or as a black tea substitute; roots also medicinal. Young twigs are reddish. Excellent landscape plant for shrub borders, low hedges, rock walls and steps. The bees will love it. Full sun or partial shade. Best in fertile moist well-drained soil, but tolerates poor dry soil. Said to require sweating before planting to break dormancy, but I've been planting them without any special treatment for years without any failures. Unbelievably hardy. Native to Northern Hemisphere. Z2.

05467 Yellow Gem Potentilla, $11.00



***Prunus x kerrasis* Dwarf Sour Cherry** New crosses between sour and Mongolian cherries are causing a great deal of excitement in fruit-growing circles these days. Productive and delicious. Some growers have reported getting 20–30 lbs. per bush after 3–5 years. On trial now in Palermo. We'll let you know how they do up here. Self pollinating, prefers full sun and decent soil with a pH of about 6.5. Pamper them with mineral amendments and compost. Z3. (10-14" transplants)

***P. x k.* 'Carmine Jewel'** About 6-7' x same. Midsummer. U of Saskatchewan intro, 1999. Dark purple skin and flesh, small pits. Good for both fresh eating and processing.

05471 Carmine Jewel Cherry, $16.00

***P. x k.* 'Crimson Passion'** 4-5' x same. (7-21-16.3) Sibling of Carmine Jewel. U of Saskatchewan intro, 2006. Released for export to the U.S. in 2011. Large dark red fruit. Excellent fresh eating with high sugar content and firm flesh.

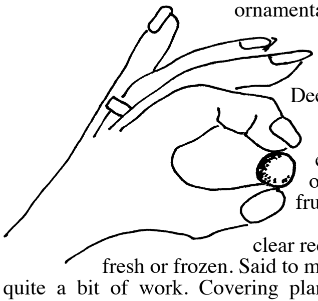
05474 Crimson Passion Cherry, $16.00

***P. besseyi* Western Sandcherry** 4-6' x same. Suckering shrub produces small plums suitable for jellies, pies and wildlife. Covered with pure white flowers in spring. The 3/4" purplish-black juicy fruit has variable flesh. Sometimes sweet, sometimes sour. Can bear very heavy crops. Foliage is silvery grey turning bronze red in autumn. Likes sandy soil in the 5.3–7.5 pH range. Tolerates hot dry "plains" conditions. Spreads by rhizomes. Two or more seedlings or cultivars required for pollination. These are seedlings. Native from Manitoba to Colorado. Z3. **ME Grown**. (12-18" transplants)

05488 Western Sandcherry, $12.00

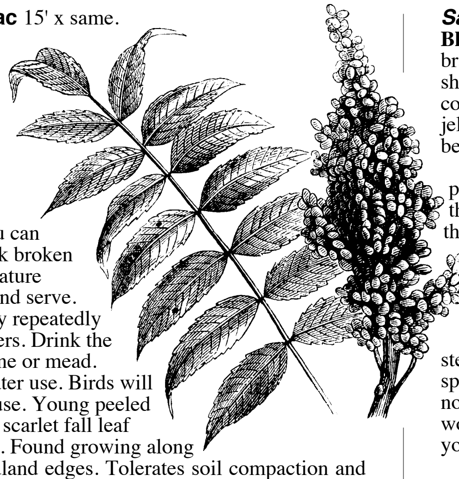
***P. maritima* Beach Plum** 6' x 5-6' Late summer. Rounded dense suckering shrub found along ocean beaches, New Brunswick to the Carolinas. Purplish-red 1/2–1" fruit in late summer. Excellent jams, sauces, and especially jelly. Although typically found growing naturally in poor sandy soils, the plants thrive in well-drained fertile soils with a pH of 6–6.5. Additional fertilization will further increase productivity. We suggest an annual 5-gallon bucket or two of compost per plant. Prune to maintain an open center for good light penetration. Plant about 5' apart. Although pollination requirements are uncertain, we recommend planting at least 2 for good fruiting. Salt tolerant! Native to eastern U.S. Z3. (9-30" transplants)

05500 Beach Plum, $12.00



***P. tomentosa* Nanking Cherry** 6-10' x same. Broad dense highly ornamental shrub, becoming open and attractively irregular. One of the earliest flowering fruits every spring. Pink buds open to masses of fragrant white 3/4" flowers. Deeply veined light green foliage with very fine fuzz (tomentosa) lining each vein underneath. Excellent hedge plant: an edible landscape crop that produces a lot of fruit that actually *is* edible! Scarlet 1/2" fruit in early summer ranges in flavor from mild to tart and in color from scarlet to clear red to pink and sometimes even white. Eat fresh or frozen. Said to make a good pie but pitting would require quite a bit of work. Covering plants with netting will deter birds from robbing your crop. Prefers full sun in well-drained soil. Plant two or more for pollination. Native to China and Japan. Z2. **ME Grown**. (12-18")

05503 Nanking Cherry, $12.00



***Rhus typhina* Staghorn Sumac** 15' x same. Fast-growing suckering spreading irregular exotic tropical-looking native shrub or small tree. Large frond-like compound foliage and red fruit "plumes" that look like the kind of things the marching band has on the front of their hats. Towards the end of July the plumes—stiff upright hairy panicles—begin to redden up. You can make "lemonade" from them. Soak broken up plumes in cold or room-temperature water for 5 or 10 minutes. Strain and serve. Make a more concentrated juice by repeatedly packing a jar with additional flowers. Drink the juice now or process into jelly, wine or mead. You can also dry the plumes for later use. Birds will feast on whatever fruit you don't use. Young peeled shoots are edible raw. Spectacular scarlet fall leaf color. Thrives in dry infertile soils. Found growing along roadsides, railroad tracks or woodland edges. Tolerates soil compaction and everything else. Forms colonies. Sun to partial shade. Transplants easily. Native to eastern North America. Z2. (3-5' transplants)

05534 Staghorn Sumac, $12.00

***Salix gracilistyla* 'Melanostachys' Black Pussy Willow** 6-10' x same. Very attractive fast-growing plant for wetland areas. Deep purple-black male catkins in early spring, suitable for the dining table or kitchen windowsill. The rather short foliage emerges orange and then turns a deep green. Stems assume a rich purple-black color in winter. Very nice dark colors all year. Winner of Royal Horticulture Society Award of Garden Merit. Prune in summer or fall. Full sun, prefers moist soils, pH adaptable but does not like shallow chalky soils. Native to eastern Asia. Z4. **ME Grown**. (12-15")

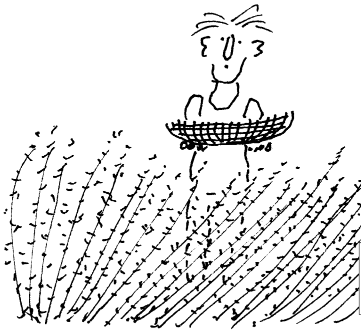
05541 Black Pussy Willow, $10.00

***S. integra* 'Hakuro Nishiki' Dappled Willow** 3-5' x same. Harry Van de Laar introduction, Boskoop, Holland, 1979. Also called *S. integra* 'Alba Maculata' as well as 'Fuiji Koreangi', 'Fuiji Nishiki', Flamingo Willow, 'Albomarginata' or Variegated Willow. Highly ornamental slender 4" pastel pink, white and green variegated foliage, maturing to green and creamy white. Some of the leaves are pure translucent white. Others have a tint of pale pink and others are tri-colored. Rounded spreading form with slender arching radiating branches. Leaves turn yellow in fall and drop late. New stems turn a coral red in winter. Prefers average soil and full sun. Once established, prune it to the ground in early spring to ensure continued variegated foliage. Foliage colors will be best in full sun and colder districts Z4. **ME Grown**.

05544 Dappled Willow, $10.00

***S. purpurea* 'Nana' Blue Leaf Arctic Willow** 3-5 x 3-6' Selection of Purple Osier willow. Medium-sized spreading shrub with small narrow blue foliage (actually greenish above and blue beneath) and delicate thin long red or green stems. This is the "angel hair" of willows. The graceful thin stems sucker, layer and form a thick and highly attractive ornamental mass. Long cultivated and used for fine-textured basket-making. Excellent bank or hedge plant, especially in wet areas but also quite suitable for a highly visible location. I've seen it used in a perennial bed; it looked great. If it gets too overgrown, cut it to the ground every couple of years and it'll come right back. Native from Europe to North Africa to Japan. Z3. **ME Grown**. (9-12" bushy plants)

05548 Blue Leaf Arctic Willow, $10.00

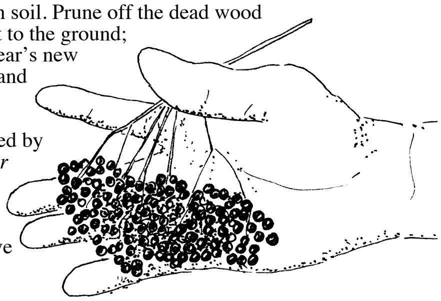


ME Grown = grown in Maine by a member of the Fedco growers coop

***Sambucus canadensis* Elderberry** 6-12' x same. Also called **Sweet** or **Black-Berried Elder**. Broad vigorous multi-stemmed shrub with spreading branches. The large creamy-white flower clusters (panicles) that cover the shrub in early summer make delicious fritters. Dry them for a wintertime cold and flu remedy tea. Purple-black berries in late summer used in juice, jelly or pie. Also famous for wine and attracting many species of birds, beneficial insects and other wildlife.

To remove berries from their stems, pack entire panicles of berries into plastic bags and put the bags in the freezer. Once frozen, remove and whack the bag with a ruler, piece of kindling, etc. The berries will easily fall from the stems. Then poke a hole in the bag and the berries will roll out! Freezing will not damage the berries. We make elderberry juice using a Mehu-Liisa steamer right on the cook stove. Allow juice to cool for fresh use or freeze/can it for later. Some like it straight; others prefer it cut with lemonade or seltzer. Either way it's good.

The Wabnaki of central Maine used to blow through hollowed elderberry stems to "fan" the flames of their campfires. Also used to blow the good spirits in and suck the bad ones out from a patient's wound. Perhaps most notably of all, the hollowed stem figures importantly in Kerry Hardy's wonderful book about pre-contact Mainers, *Notes on a Lost Flute*. I'll let you figure that one out.



Best grown in moist rich soil. Prune off the dead wood in late spring or cut it right to the ground; it will fruit again on this year's new wood. Free from diseases and insects. Considered self-pollinating, but pollination will be improved by planting two of *the same or different* varieties near one another. Many new varieties are in the pipeline. Stay tuned! Native to eastern U.S. Z3. (1 yr well-rooted plants)

***S. c.* Adams No. 1** Selected by William Adams, Union Springs, NY, 1926. Very large vigorous strong productive bush. Large berries and fruit clusters. (1-yr well-rooted plants)

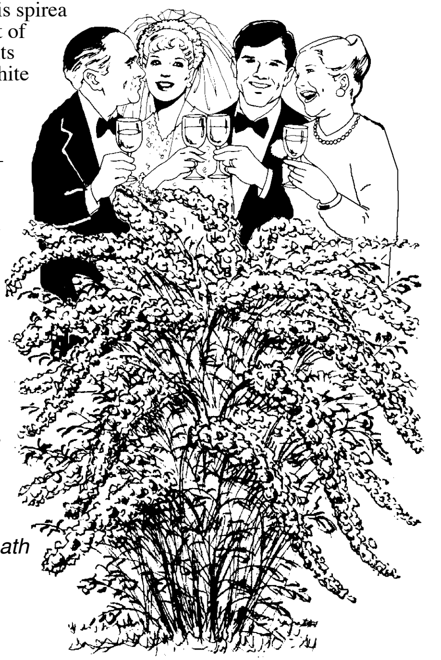
05554 Adams Elderberry, $16.00

***S. c.* 'Aurea'** Probably called Aurea from the Latin for its unusual "golden" foliage which ranges through shades of golden-yellow, chartreuse and yellow. "Beautiful, splendid" fruit is cherry red, unusual for a *canadensis*. Discovered and introduced at least 60 years ago. Other characteristics similar to green-leafed varieties.

05551 Aurea Elderberry, $16.00

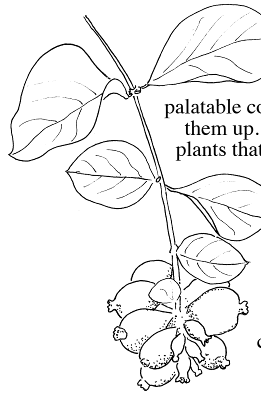
***S. c.* Jags** Fedco introduction, Washington, ME, 2012. Wild seedlings that established themselves near a stand of Johns, Adams and Goodbarn elderberries on Fedco grower Sharon Turner's farm in Washington, ME. Jags have incredible blossoms and are—surprisingly—thriving in a shady area. Due to their common parentage, you can expect similarities among these plants. However, because they are from seed, not cuttings, you can also assume that each one will be unique in its own way. **ME Grown**. (18-24")

05581 Jags Elderberry, $16.00



***Spiraea prunifolia* Bridalwreath Spirea** 5-9' x 6-8' Also called Popcorn or Shoe Button Spirea. This spirea looks like it came right out of grandma's side yard with its bright masses of double white flowers on long arching branches in early spring. Large, graceful classic old-fashioned coarse open-vase-shaped habit. Some branch tips will touch the ground. This is not a small plant for a small space. Deep blue-green foliage. Requires very little pruning although older plants can be rejuvenated by cutting to the ground following bloom. Like other spring-flowering shrubs, prune after it's finished flowering. Prefers full sun to partial shade, moist but well-drained soils. Native to eastern Asia. Z4.

05640 Bridalwreath Spirea, $12.00

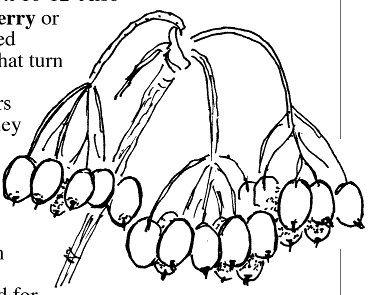


Symphoricarpos albus **White Snowberry** 5-6' x same. Also called **Common Snowberry** or **Waxberry**. Broad rounded arching spreading wildlife and medicinal shrub. Inconspicuous pinkish flowers in late spring, followed by plump whitish edible but insipid berries. More palatable cooked, but still better for the birds who will scarf them up. Leaves, roots and bark all medicinal. One of the plants that native people tossed into the stream to stun fish prior to harvest. Ripple-edged foliage of muted multi-shaded blues and greens. Quite beautiful all season. Excellent for holding soil on a steep shady moist bank and providing good wildlife cover and forage at the same time. Will spread with age and eventually form colonies. Easy to transplant, adaptable to most soils, sun or shade, even clay and city conditions. Drought tolerant. Native eastern U.S. south to VA. Z3. **ME Grown**. (12-18" transplants)

05661 White Snowberry, $12.00

S. orbiculatus **Coralberry** 3-5' x 4-8' Also called **Red Snowberry**, **Buckbrush**, **Indian Currant** and **Devil's Shoestring**. Low-growing spreading arching shrub. A good wildlife plant for banks and hillsides. Like the white snowberry, the fruit is edible though not widely used and the bark and foliage are medicinal. Dense clusters of small pinkish or purplish-green flowers in early summer followed by clusters of small purple-red berries that persist into winter. Will attract insects, bees and birds. Some say unattractive to deer, but others say otherwise (hence the name Buckbrush). Red fall foliage. Adaptable to most soils, moist or dry. Shade or sun. Native eastern U.S. west to OK and north into parts of Canada. Z4. **ME Grown**. (12-22" transplants)

05663 Coralberry, $12.00



Viburnum lentago **Nannyberry** 8-30' x 10-12' Also called **Wild Raisin**, **Black Haw**, **Sheepberry** or **Sweet Viburnum**. Large open vase-shaped suckering shrub with edible oval berries that turn from green to yellow to red to blue-black raisins, available to birds, hikers and skiers all winter. Called "wild raisin" because they are best in that dried stage. Try cooking the berries with a small amount of water and then use the resulting "nanny-butter" as a sauce and in fruit leather. Or simply add the shriveled raisins to your oatmeal. Large clusters of fragrant white flowers in spring. Shiny foliage, purplish red in fall. Medicinal bark and leaves. Recommended for naturalizing landscapes, bird and wildlife habitat, screens and borders. Prefers moist well-drained average soils but adaptable to poor compacted or dry soils. Full sun to partial shade. pH adaptable. Native to eastern U.S. and Canada. Extremely hardy. Z2. **ME Grown**.

05680 Nannyberry Viburnum, $13.00

V. opulus **'Roseum' Common Snowball Viburnum**, **Guelder Rose** or **European Snowball** 10-12' x same. Extremely showy large double snowball-like white flowers cover the vigorous shrub in spring and remind you how glad you are that winter is really over. Bears profusely enough to have one heck of a snowball fight. Large coarse old-fashioned rounded habit, popular in Maine for generations and in Europe for over 400 years. Dark green three-lobed maple-like foliage. Plenty of bright red berries for the birds. Excellent in borders. Easy to grow. Adaptable to a wide range of soils but happy in wet and even boggy spots. Flowers best in full sun. Susceptible to viburnum leaf beetle. Native to Europe, North Africa and northern Asia. Z4. **ME Grown**. (18-24")

05686 Snowball Viburnum, $13.00

V. trilobum **'Wentworth' Highbush Cranberry** 8-12' x same. Also known as **Crampbark**. Underused edible and medicinal native multi-stemmed shrub. Clusters of flat white flowers in May attract beneficial insects. Pendulous bunches of red berries popular with dozens of bird species ripen mid-October. Fruit has a checkered reputation. Everyone seems to be in search of the highbush cranberry holy grail: the one that can be cooked without stinking. We suggest juicing them with no heat at all. Pick fruit before or after it softens on the bush. If still firm, freeze then thaw berries. Thoroughly crush with water (a quart per gallon berries) if making juice, or without water if making jam or jelly. Strain for juice or jelly; run it through a food mill to remove seeds for sauce. Use fruit alone or in a blend. Bark used as an anti-spasmodic; tea especially good for relieving menstrual cramping. Tolerates dry soils if high in organic matter, but prefers rich moist well-drained soils, sun or shade. Good for screens and hedges. Soil pH 6–7. Susceptible to viburnum leaf beetle; check with your local extension office or nursery to determine if this could be a problem. Not a bog cranberry (see **#6029** p. 34). Native to northeast U.S. and Canada. Self-pollinating. Z2. (9-12" transplants)

05706 Wentworth Highbush Cranberry, $13.00

Weigela florida **'Polka' Weigela** 3-4' x 4x5' Felicitas Svejda intro, Ag Canada Research Station, Ontario 1988. Compact dense rounded slightly vase-shaped shrub that may arch to the ground. Clear pink blossoms with a yellow throat. The old-fashioned ornamental has provided a reliable source of summer flowers for generations. Sometimes pronounced 'why-*jeel*-ee-uh' but that's incorrect. It's 'why-*jeel*-uh'. Blooms for up to 16 weeks from June through September. Dark green foliage. Prefers lots of sun and well-drained soils but will do fine in most conditions, city or country. Species native to eastern Asia. Z 3/4.

05729 Polka Weigela, $13.00

Rosa **Rose** Exceedingly hardy, vigorous, disease- and pest-resistant, and significantly easier to grow than most named varieties. These roses need not be pampered; all are rugged and hard to kill. Recommended as a solution for those who want roses but are tired of struggling with tender hybrid tea roses, or who associate roses with pests, poisons, disease and winterkill.

We focus on hardiness and fragrance in our rose selections. If the description says very fragrant, it is! We also regularly feature roses with large edible hips. See below for more about rose hips.

Each year we offer a different selection of the best varieties available. If your favorite is not on the list this year, we may be offering it next year. We cut our plants back to about 6" to encourage optimal growth and bloom. (stocky well-rooted plants)

R. rugosa 4-6' x same. Also called **Japanese Rose** or **Beach Rose**. Vigorous spreading shrub. Flowers range from deep pink to white. Red hips up to 1" for jams, teas, and fresh eating right off the bush. Flower buds used in traditional Chinese medicine to regulate *qi* and promote blood circulation. The dark green wrinkled (rugose) leaves form a backdrop for the highly fragrant single flowers and the large edible hips which follow. Blooms form on both old and new wood, so pruning necessary only to control size. Prefers full sun and well-drained fertile soil with a pH of 6–7, but will grow in depleted soil and even sand. Tolerates salt, pollution and drought; practically care-free. Although generally assumed to be native to China and Japan and brought here by sailors long ago, there is now reason to believe that the rugosas may have been here for many centuries and may even be native. Z2. **ME Grown**.

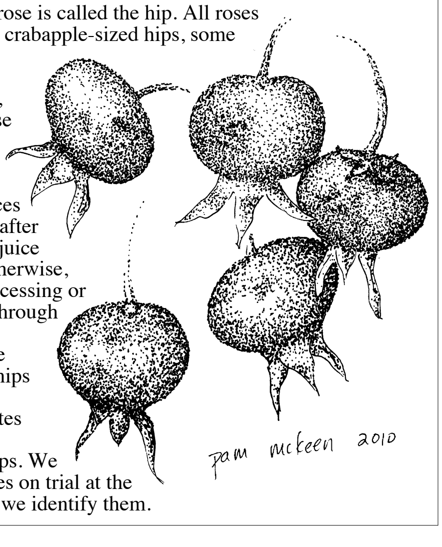
05751 Rosa rugosa, bundle of 3, $18.00

R. **'Cuthbert Grant'** 3x3' [(Crimson Glory x Assiniboine) x Assiniboine] Parkland Series, Henry Marshall intro, Morden Research Center, Manitoba, 1967. Selected as Manitoba's centennial rose in 1970. Large fragrant 4" semi-double (15–20 petals) deep dark intense velvety red blooms in clusters of 3 to 6. Glossy dark green foliage. One of the first roses to develop buds in the spring. Blooms in June and then repeats until frost. Vigorous compact shrub. Dark green foliage. Red-orange hips. Named for the Canadian fur trader, Métis leader, farmer, justice of the peace, and politician (c. 1793-1854). Excellent disease resistance. Z3.

05781 Cuthbert Grant Rose, $12.00

Rose Hips

The round or oblate fruit of the rose is called the hip. All roses have them. Some have great big crabapple-sized hips, some have tiny hips and most are in between. The hips are high in vitamin C, carotene, B vitamins, vitamin E and bioflavonoids. Use them fresh in wine, jam, jelly. Dry them and make tea, or add the dried hips (whole or ground up) to soups, stews, syrups, sauces or smoothies. Harvest rose hips after frost. It's OK to make jelly and juice without extracting the seeds. Otherwise, remove seed by hand before processing or cook them up and run the pulp through a sieve. The straight rugosas have very good large hips. Some named cultivars have excellent hips even larger than the species. Unfortunately, books and websites rarely tell you much—if anything—about who has the hips. We have many promising hippy roses on trial at the farm and will offer new ones as we identify them.



***R.* ‘Fru Dagmar Hastrup’** 3-4' Hastrup, Denmark, 1914. Also called ‘Frau Dagmar Hartopp’. Deep pink buds and large (3") loose light silvery clear pink single 5-petaled heavily fragrant blooms, often veined with darker pink. Golden yellow stamens. Blooms all season. Relatively low-growing form with rich green, deeply veined disease-resistant foliage that turns bronze in fall. Very large red hips. Recommended for the edible landscape. Z4.

05791 Fru Dagmar Hastrup Rose, $12.00

***R.* ‘Jens Munk’** 4-6' x same. (‘Schneezwerg’ x ‘Fru Dagmar Hastrup’) Explorer Series, Canada, 1974. Bright medium pink semi-double (25 petals) 2½"-3" blossoms with bright yellow stamens and a spicy fragrant bloom throughout summer. This rose amazes me every year. The yellowy-pink flower color is great. I like it better than Therese Bugnet. Relatively large upright dense well-rounded shrub with small clean medium-green foliage would be good for a hedge. Sparse hip production. Z3.

05807 Jens Munk Rose, $12.00

***R.* ‘Morden Sunrise’** 3x3' (Sunsprite x unnamed seedling) Parkland Series, Manitoba, Canada, 2000. Yellow-orange buds open to semi-double multi-colored flowers, each one a deep rich yellow in the center blending into orange and then into pink at the blossom edge. This is a rose on fire. If you like yellow and orange, you will not be disappointed. The colors are strong and vibrant. As the fragrant flowers mature they fade to a creamy yellow white. The low-growing shrub blooms all summer on canes that turn reddish brown in winter. Shows minor dieback some winters but then recovers nicely and blooms profusely. Resistant to blackspot. Z4.

05827 Morden Sunrise Rose, $12.00

Ramblin’ Red® 6-10' *R.*‘RADramblin’, Radler intro, 2001. Seedling of Henry Kelsey. Bright red recurrent climber. Our best-selling rose the last time we offered it. Medium true-red semi-double flowers. Blooms in late spring and keeps on blooming though summer. What a delightful surprise this rose has turned out to be. We tied it loosely to a fence near the driveway where it’s wrapped itself up and about. Visitors and neighbors all ask what it is. They all want one! Very hardy. Z4/5.

05840 Ramblin’ Red Rose, $12.00

***R. glauca* Redleaf Rose** 5-7' Formerly *R. rubrifolia*. Feathery upright arching spreading shrub with purple stems and soft reddish-purple coppery foliage. Exceptionally beautiful throughout the season. We planted this rose by the front door for the really nice foliage. Many people “dis” this rose because it’s only about the foliage. I disagree. Although the flowers might get lost from a distance, they are quite wonderful: single with brilliant yellow stamens and distinctly two-toned petals of white and bright pink. Plant it where you’ll walk by it every day. Abundant bright smallish red-purple hips. Will spread by suckers over time forming a small colony. Disease resistant. Native to central Europe. Z2.

05842 Redleaf Rose, $12.00

***R. rugosa* ‘Scabrosa’** 5x5' Harkness introduction, UK, 1950. Also called *R. superba*. The epitome of the old-fashioned straight rugosa rose with all the excellent rugosa qualities to the max. One of the absolute best roses for the edible landscape. Wonderfully fragrant, very large single deep mauve-pink flowers and huge orange-red hips that can be the size of cherry tomatoes. Showy yellow stamens. Recurrent bloomer. It’s the perfect rugosa. No frills, no bells, no whistles. Just beautiful flowers and large hips. Large dense rounded shrub. Good fall foliage color. Extremely hardy. No disease issues ever. Z3.

05845 Scabrosa Rugosa Rose, $12.00

ME Grown = grown in Maine by a member of the Fedco growers coop

***R. gallica* ‘Tuscany Superb’** 4-5' x 4' Also called **Superb Tuscany**. Thought to be a sport of Tuscany (Old Velvet Rose). Introduced about 1840. Moderately fragrant, semi-double dark red to crimson-maroon flowers. Flowers are larger than Tuscany and stamens less visible. Red-orange hips. The petals retain their fragrance when dried and have been used medicinally, cosmetically and in potpourri for centuries. Gallicas are one of the most celebrated of all ancient roses, steeped in history, legend and myth. Think Persian Magi, Red Damask, Blood of Christ, Friar Tuck, Knights in Shining Armor, Fair Rosamond, War of the Roses, The Red Rose of Lancaster, The Rose of Provins, etc! Thought to have originated in what is now Turkey or Iran, gallicas were brought to France with knights returning from the Crusades where more than 2,000 varieties were named. Probably in the parentage of most or all modern roses. Easy to grow. Soil adaptable. Even tolerates poor soil. Sun or partial shade. A very tough plant. For a delightful and thorough history and descriptions of this amazing rose, find yourself a copy of Suzanne Verrier’s book, *Rosa Gallica*. Z3/4.

05858 Tuscany Superb Rose, $12.00

***R. r. alba* White Rugosa** 6x6' Large spreading shrub will form colonies along the bank, the seashore or even across your lawn. Pink buds and large 2–3" pure white single 5-petaled flowers with cream-colored stamens. Fragrant, recurrent bloomer. Large orange hips. Orange and scarlet fall foliage color. Incredibly rugged, tolerates clay, muck, sand and salt. Z2.

05860 White Rugosa Rose, $12.00

Roses prefer full sun (at least 4–6 hrs per day) and a pH of 6.0–7.0. Space them 4–6' apart. They will do well in most well-drained soils with a good amount of organic matter. In locations with poor drainage, add gravel at the bottom of the planting hole, or build in drainage. Pick a site with good air drainage, but avoid sites with cold northwest winds. Avoid competition with tree roots

Plant roses as early as soil can be worked. Most roses’ roots don’t spread beyond the original hole, so dig a bushel-sized hole, as deep as 2' or more. We recommend a bale of rotten hay in the bottom of the planting hole. Mix soil with liberal quantities of well-rotted manure and compost. Add a coffee-can full of rock phosphate or bone meal.

Soak in water overnight or up to three days before planting. Prior to planting, prune roses back to 3 canes, 4–5" tall. Plant them 1" below the level they were in the nursery. Add water as you fill in the hole to puddle it in. Mound soil around branches to prevent them from drying out, and to encourage buds to sprout. As the buds open, pull back the soil to the correct level.

Shrub roses and climbers will require little pruning in later years. Any pruning should wait until after the Forsythia blooms. Remove dead or broken branches, and periodically cut out the oldest wood. Keep roses well mulched to retain moisture and reduce weeds. Add 2 shovelfuls of composted manure to each crown late in the fall. For more information see Suzanne Verrier’s pamphlet *Growing Old-Fashioned Hardy Roses Organically,* available in the book section of our Seed Catalog.

Syringa **Lilac** is known nearly everywhere by some variation of the Persian word *lilak* (meaning 'bluish'), but lilacs actually range from brilliant white to pink to red to every conceivable shade of purple and even blue. From small shrubs to large shrubs and trees, compact vase-shaped specimens to huge rounded spreading masses, only the crabapple offers a greater selection among ornamental woody plants. Twenty-three species make up the genus *Syringa*, two of which are native to the limestone mountains of southeastern Europe, while the rest are native to the temperate Far East.

Although primarily known as ornamental, the lilac is also edible and medicinal and can even be used as a dye plant. Some recommend the flowers for fritters à la elderberry or black locust. Also traditionally used for treating kidney disease and malaria. The bark, branches and foliage are useful in reducing fevers.

In the landscape, lilacs are excellent alone or in hedges. Deep green glossy heart-shaped foliage looks good from spring through fall. Intensely fragrant blooms in May over a period of several weeks.

As with roses and crabapples, we vary our list each year to give you a wide selection. This year we offer two "must-haves" for every garden: Ludwig Spaeth and President Lincoln. If you want only two cultivars, try them. I'm pretty sure you'll be incredibly happy. If you have suggestions for cultivars you'd like us to offer in the future, please let us know. (large 1-4 yr old transplants)

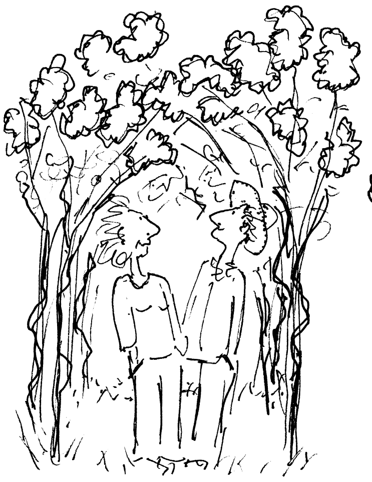
See #**6617**, p. 50, for Tree Lilac.

S. **x** ***hyacinthiflora*** **'Evangeline'** 8-10' (*S. oblata dilatata* x *S. vulgaris*) Frank L Skinner introduction, Dropmore, Manitoba, Canada, 1934. Dark pink buds and double light magenta blooms. I call the color faint lavender. Very fragrant, especially for a hyacinthiflora. Blooms two to three weeks earlier than the common (*vulgaris*) types. Upright grower. Not well known. An introduction from one of Canada's greatest plant breeders. Using pollen from seedlings of Korean lilac he'd received from Charles Sargent in 1918 and again in 1922, Skinner developed a whole series of early blooming cultivars. The most famous include Mount Baker, Maiden's Blush and Sister Justina—the last considered by some to be the finest of all white lilacs. Z3.

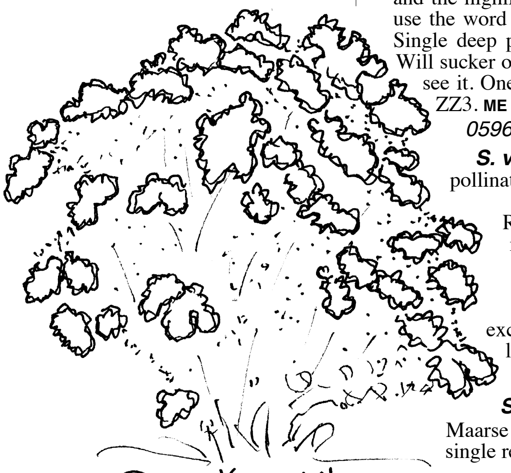
05882 Evangeline Lilac, $13.50

S. **x** ***tribrida*** **'Miss Canada'** 6-9' x same. (*S.* x *josiflexa* 'Redwine' x *S. prestoniae* 'Hiawatha') William Cumming introduction, Morden Ag Research Center, Morden, Canada, 1967. Masses of deep red buds followed by lovely fragrant single pink blossoms after most other lilacs have faded. Every spring the vulgaris lilacs come and go. Days later I walk outside and am knocked back by a wonderful fragrance. My brain says, "What?" Then I remember and look up. There is the deep pink—nearly red—Miss Canada greeting me as though saying, "And you thought lilac season was over!" Frequently recommended as one of the best of the unusual. Outstanding plant. Z2.

05906 Miss Canada Lilac, $13.50



PRUNE LILACS TALL
FOR A SHADY WALKWAY



Prune Your Lilac
LOW FOR a shrub

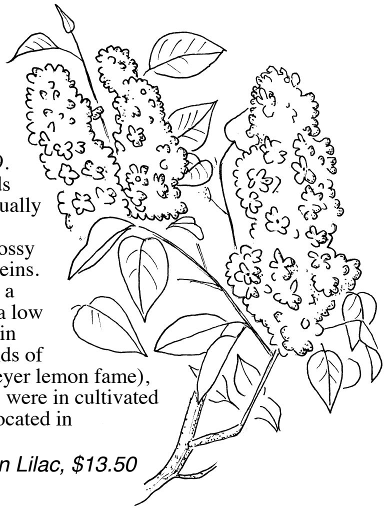
Lilacs are adaptable, easy to grow, nearly indestructible and practically maintenance-free. Plant them in a well-drained location in moderately rich soil. Sandy gravelly loam is perfect. They prefer sun at least two-thirds of the day. We suggest planting them with a shovelful of lime. Add another shovelful of lime every three years. A yearly mulch of manure or compost will encourage spectacular annual blooming.

How to prune lilacs

As the plant matures, prune off a quarter of the new suckers and the oldest growth (a few main stems each year). Some growers prefer to keep the plant low and bushy. Do so by "topping" it off every year: prune any upright branch back to a junction with a lower branch. Others perfer a tall tree-like form. Our friends Philippe and Danielle have let theirs soar to 8' or more, removing the lower branches and creating a magical walkway in the process. Lilacs are more than willing to cater to your own personal vision. Have fun! No need to cut off spent flowers except for appearance's sake.

S. meyeri **'Palibin'** 3-4' x 3-6'. Also called **Dwarf Korean Lilac**, 'Palibiniana', and *Shu ting hsien* (fragrant-tube tree) in Chinese. Discovered and collected by Frank Meyer, Fengtai (near Beijing), 1909. Dwarf lilac with reddish-purple buds and fragrant pale violet flowers, actually almost pink. Blooms profusely in midseason. Very attractive small glossy dark green leaves with interesting veins. An excellent choice for featuring in a smaller space, a rock garden or for a low hedge. Does not sucker. Cultivated in China for hundreds or even thousands of years. The plants that Meyer (of Meyer lemon fame), and later Joseph Hers, "discovered" were in cultivated gardens, and none have ever been located in the wild. Native of China. Z3.

05909 Palibin Dwarf Korean Lilac, $13.50



S. vulgaris **'Krasavitzka Mosky'** 12' x 8' N237 ('Belle de Nancy' x 'I V Mitchurin') Leonid Kolesnikov introduction, Russia, 1974. (In English, **Beauty of Moscow**.) Dazzling pearly lavender-pink buds open to double, delicate light pink-shaded white flowers. Described by John Fiala in his book on lilacs as "excellent in every way." Considered one of the best creations by one of the master hybridizers of the 20th century. Prolific vigorous upright plant. Later than other vulgaris types. Z3. **ME Grown**.

05936 Beauty of Moscow Lilac, $13.50

S. v. **Common Purple** 12-15' x same. A mass of medium-light purple blooms every year. A magnificent New England sight for nearly 400 years. When a nursery friend looked out our living room window and thought we had some fancy new cultivar, I chuckled, "Nope, just the good old common purple." Never a disappointment. Suckers freely, the best lilac for a spreading hedge. Z2. **ME Grown**. (2-3' field grown)

05945 Common Purple Lilac, $13.50

S. v. **'Ludwig Spaeth'** 10-12' x same. ('Andenken an Ludwig Späth') Späth Nursery, Berlin, 1883. Ludwig Spaeth's deep rich purple flowers are always a knock-out. Dark, yes, but never so dark that the color becomes flat and the highlights lost. This is a magnificent purple. Although I hesitate to use the word red, there is enough red in the purple to give it a regal look. Single deep purple flowers on large upright spires. Upright growth habit. Will sucker over time. Some say the newer cultivars are superior but I don't see it. One of the very best of the very best. Still a must for every yard! ZZ3. **ME Grown**. (2-3' field grown)

05960 Ludwig Spaeth Lilac, $13.50

S. v. **'President Lincoln'** 10' x same. ('Alba Virginalis' x open-pollinated) John Dunbar introduction, Rochester, NY, 1916. While the name 'lilac' means 'bluish' in Persian, and the native lilacs of Romania and Serbia have blue genes, so to speak, blue lilacs are rare. A few newer blue cultivars have been introduced in recent years but President Lincoln remains at the top of the heap. 'Lincoln' is blue. Given a chance it will spread from suckers to form a massive shrub covered with smallish clusters of exceptionally fragrant single light lavender-blue blooms. An absolutely outstanding lilac. Blooms early and quits late. Z3. **ME Grown**.

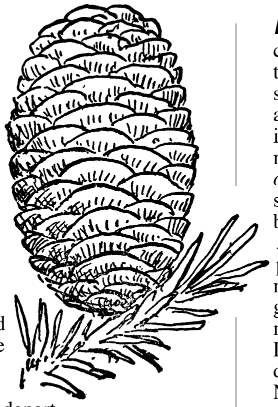
05990 President Lincoln Lilac, $13.50

S. v. **'Sensation'** 10' x same. Sport of 'Hugo de Vries'. Dirk E Maarse introduction, Aalsmeer, Netherlands, 1938. Very fragrant large single reddish-purple blooms, with each petal edged in pure white. The effect: an interwoven pattern of purple and white. Unique and beautiful, a real show stopper. Plant this one where you can see it from not too far away. Deep purple buds. Upright rounded open form. *Fine Gardening* magazine calls it "sensational purple flowers with pinstripe margins." Selected as the cover photo for John Fiala's classic text, *Lilacs: The Genus Syringa*. Z3. **ME Grown**.

05996 Sensation Lilac, $13.50

S. v. **'Sesquicentennial'** 8-10' x 5-6' ('Rochester' x 'Glory') Richard A Fenicchia introduction, Highland Park, Rochester, NY, 1972. Large single rich medium-purple fragrant blooms. Occasionally displays Rochester's multi-petalling. Heavy crops with many panicles forming along the laterals, causing stems to spread and bend. Slightly suckering. Developed by one of the most important modern lilac breeders and named for the 150th anniversary of the Highland Park Arboretum in Rochester. Z3. **ME Grown**.

05998 Sesquicentennial Lilac, $13.50



Large Trees range from about as tall as a phone pole to somewhere near gigantic. Oaks trees often grow to be 60–80 feet high. The "pre-contact" pines of New England were well over 200 feet. Redwoods in California have been measured at 360 feet. I once measured the branch spread of a tulip popular at the New York Botanic Gardens. It was an incredible 110 feet wide. The largest plants on earth, large trees are deeply rooted and long-lived. They store vast amounts of water and carbon. They scoop up CO_2 from the sky and reward us with oxygen in return. They provide us with thousands of different foods, medicines and other valuable products. They shade us and cool us in summer, and protect us from the cold winter winds while providing room and board for all manner of wildlife. They feed themselves while they build and improve the soil on which they live. They have thrived on the planet for millions of years and will likely still be here for millions more after we depart. Large trees play an absolutely essential role in the functional landscape.

***Abies balsamea* Balsam Fir** 45-75' Called *popakw*, 'the pitch tree,' in Wabnaki. One of the most abundant and perhaps the most valuable of all our native conifers. Twigs, inner bark, needles and blister sap are all medicinal. Small "blisters" contain a transparent aromatic resin that native peoples used as an inhalant for headaches and congestion, and as a salve for cuts, arthritis, even severe burns and frostbite. Needle and twig tea is rich in vitamin C. The fragrant needles are also a favorite for wreaths, pillows and potpourri. Narrow, conical, smooth-barked. Prefers well-drained moist acid soils. Avoid polluted areas. Semi-shade tolerant, slow-growing. Good specimen tree and songbird nesting area, and a favorite browse of moose and deer. Native Labrador to PA. Grown in Maine. Z3. (3-2TR, 6-12")

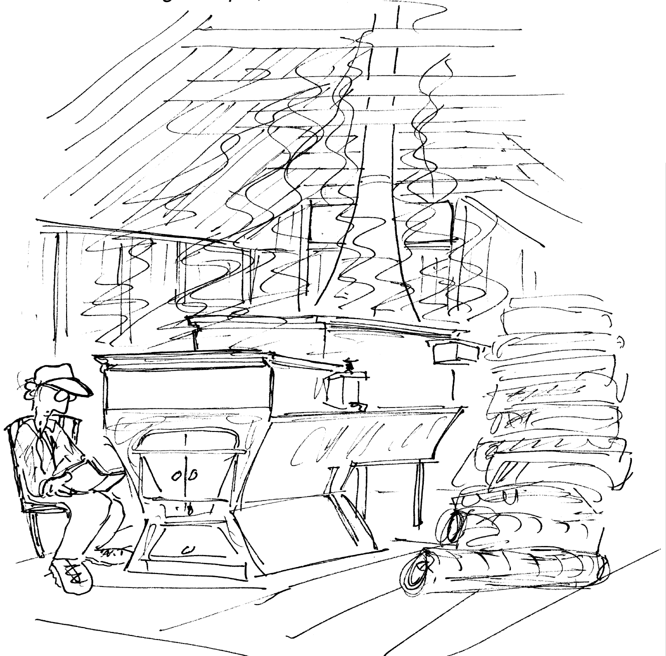
06063 Balsam Fir, bundle of 5, $14.00

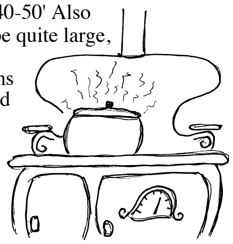
***Acer rubrum* Red Maple** 50-60' Also known as **Swamp** or **Soft Maple**. Usually has a central leader and an upright growth habit, compared to the bushier sugar maple. In early spring the dark red flowers cover the driveway long before any leaves appear. In the fall the foliage turns electric orange, yellow and brilliant red. Excellent in the yard. Does not have the weak branching problems of silver maple or the invasive "qualities" of the abominable Norway maple. Sometimes tapped for sap in spring. Inner bark can be used medicinally in teas. Transplants easily. Prefers moist acid conditions but is adaptable to dry locations. Note that this is *not* the red-leaf maple *A. platanoides* 'Crimson King'. Native to eastern North America. Z3. **ME Grown**. (3-4' transplants)

06075 Red Maple, $16.00

***A. saccharum* Sugar Maple** 50-100' Largest of our native maples, also known as **Rock Maple**, valued for shade, syrup, and lumber. Traditionally a pair of sugar maples was planted in front of a farmhouse on the inhabitants' wedding day. Those "wedding trees" still grace many Maine front yards after all these years. Famous for its yellow gold scarlet and crimson fall foliage and its fresh sap which is boiled down to make real maple syrup. Huge upright spreading form with light grey bark. Shade tolerant, making it easy to interplant in existing woods. Prefers moist, well-drained soils. Cold hardy. Susceptible to salt and air pollution; not a good city tree. Native Quebec to Gulf Coast. Z3. (3-5')

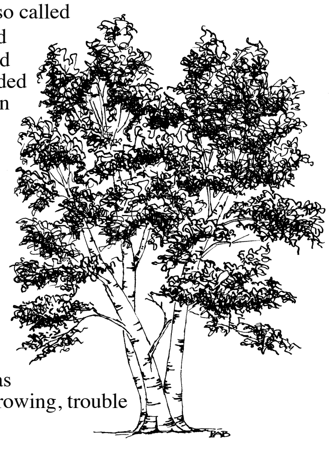
06078 Sugar Maple, $18.00





***Betula alleghaniensis* Yellow Birch** 60-75' x 40-50' Also called *B. lutea*. Although yellow birch can grow to be quite large, they often tend to be modest and irregular in form, snuggling themselves into shady niches along streams and seasonally wet spots. Somewhat rare and coveted in central Maine. The preferred habitat of the highly medicinal black chunky Chaga mushroom (*Inonotus obliquus*). We usually have a chunk of chaga steeping on the stove all winter: the resulting dark black tea is both delicious and highly medicinal. Although lacking the popular white bark of the paper birch (*B. papyrifera*) this is nonetheless a magnificent tree. The deep dark golden-yellow shredding exfoliating bark glows and dazzles in the woods. Yellow fall color. I have several hand planes made of its very hard dense high-quality wood. Makes beautiful flooring too. Like sweet birch (*B. lenta*), the twigs are a source of oil of wintergreen. They don't mind shade. Moist or wet soil, acid or alkaline but avoid standing water. Native to eastern North America. Z3. (4-5')

06084 Yellow Birch, $14.00



***B. nigra* River Birch** 60-80' x 40-60' Also called **Red Birch**. With its graceful silhouette and attractive bark, river birch is a highly prized ornamental. Grows to be a very large rounded tree. Found along stream banks and riparian areas where conditions are wet in winter and spring, dry in summer and fall. Dark green summer foliage yellows before dropping. The beautiful reddish-brown exfoliating bark reveals the equally ornamental multi-shaded inner bark. Leaves, twigs and bark all used medicinally. Traditionally a salve was made by boiling the buds until they were thick and pasty, adding sulphur and applying externally to skin sores and ringworm. Birds eat the seeds and deer browse the foliage. Wood not as valuable as other birch. Prefers moist, acid soil. Fast growing, trouble free. Native to eastern U.S. Z4.

06090 River Birch, $16.00

***Castanea dentata* American Chestnut** Up to 100' Once again we're offering seedlings of pure American chestnuts, from seed collected in Maine by our state chapter of the American Chestnut Foundation. Before 1900, American Chestnut was the predominant and most important deciduous tree in the eastern U.S. The arrow-straight rot-resistant wood was used for everything from mine timbers to musical instruments. Heavy annual crops of delicious sweet nuts were an important food for wildlife and humans. When cut down, the trees quickly grew back from the stump. The Asian fungus *Endothia parasitica* (chestnut blight) was discovered in Brooklyn in 1904; within 50 years it had killed virtually every chestnut tree in the eastern U.S. The blight does not kill the roots however, and rare isolated stands of mature trees can still be found. The trees we're offering are blight-susceptible, but will probably thrive if there is no active blight infection within a mile. Our two are still thriving after over 30 years. Fast-growing and straight-trunked with a wide-branching magnificent rounded crown. Fragrant white blooms in July. Ribbed sharp-toothed lustrous dark green foliage. Yellow fall color. Prefers well-drained acid soil. Two or more needed for pollination, but will cross-pollinate with Asian and European chestnuts. Precocious, bearing heavy crops of nuts in 10 years. From each American Chestnut purchase, Fedco will donate $4 to support the work of the American Chestnut Foundation. Z4. (8-10")

06116 American Chestnut, $24.00

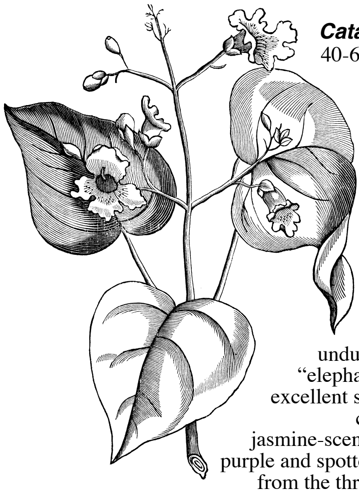
Conifers transplanted once in the nursery have a much higher success rate. Conifers in this section are mostly three- to four-year-old transplants. 2-2TR means the plant is 4 years old: 2 years as a seedling and 2 years as a transplant. P+2 means one year as a plug and 2 years as a transplant.

Conifers tolerate a wide range of soil conditions, but prefer a pH between 5.5–6.5. If you are planting in dry or well-drained areas, dip tree roots in Agri-gel solution before planting to protect roots from drying out. Do not use Agri-gel in heavy clay soils or wet areas. Do not soak conifers overnight; a good dipping is sufficient.

Before planting, prune off $^1/_3$ of the roots. Dig a small hole or make an incision with a spade or planting bar and slip the tree in to the level it grew in the nursery. Fan the roots out; do not wind them around in the hole. It is much better to prune the roots than to crowd them in the hole. Water well and pack the earth down with your feet to remove air pockets.

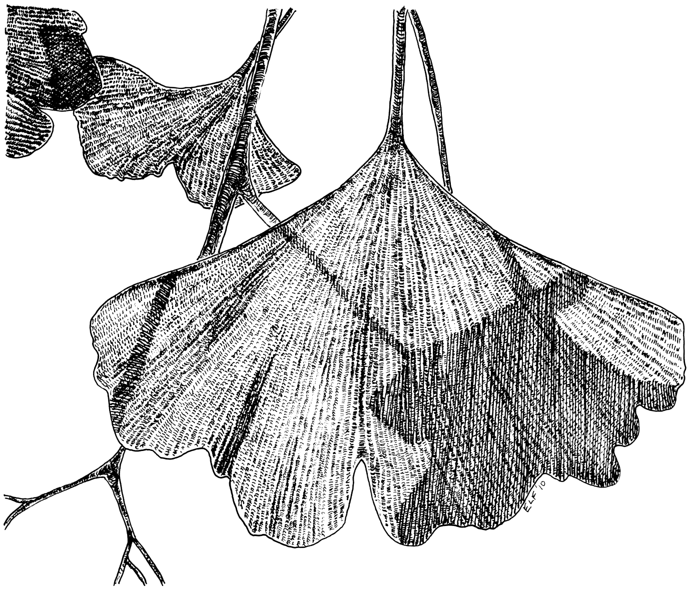
Young conifers need $^3/_4$-1" of rain per week. Periodic deep waterings are far more beneficial than frequent sprinklings. No fertilization is necessary in the first year. In later years you may fertilize around the drip line.

To make evergreens dense and compact, remove leader and center bud on the end of each side branch.



Catalpa speciosa **Northern Catalpa** 40-60' Also known as **Western Catalpa**, **Elephant Ear Tree**, **Catawba** and **Cigar Tree**. If you can't afford orchids for that special someone, plant a Catalpa and you'll be swimming in orchid-like flowers early every summer. This is not a tree known for any edible or medicinal qualities, but with its form, foliage and flowers, this tree looks great on the street and in the yard. Fast-growing coarse habit with a somewhat narrow open irregular crown and thick interesting undulant branches. Dense foliage of huge "elephant ear" heart-shaped leaves provides excellent shade. Covered in early summer with clusters of ruffled incredibly fragrant jasmine-scented white blossoms each dotted with purple and spotted with rich buttery-yellow radiating from the throat. Fruits are long bean-like "cigar" pods. Prefers deep moist fertile soil, but thrives in almost any conditions and soils, sun or partial shade. Grows rapidly. Remains dormant late into spring. Native to central U.S. Z4. (1.5-3' transplants)

06126 Northern Catalpa, $13.00

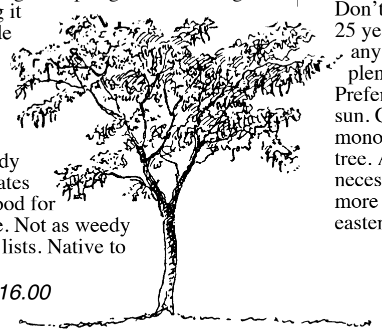


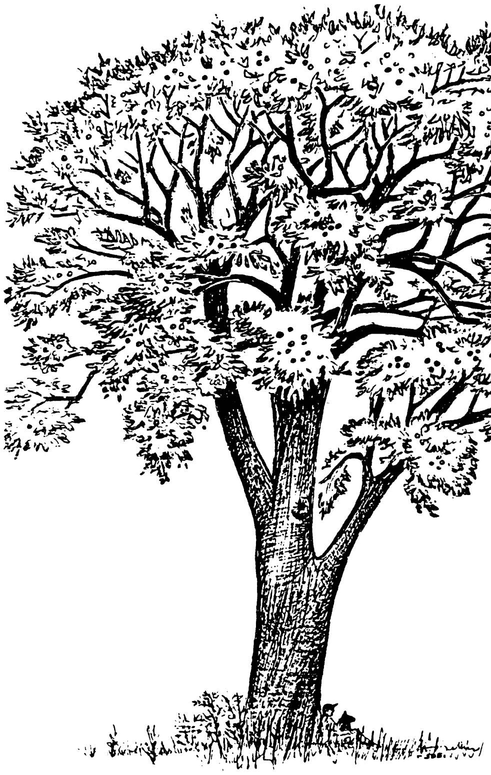
Ginkgo biloba **Ginkgo** 50-80' Also called **Maidenhair Tree**. Considered the oldest living genus of seed plants; grew in North America in the time of the dinosaurs. Upright when young with branches that spike out and up like the rays of the sun, eventually becoming wide-spreading and graceful. Slow-growing, can be extremely long-lived. Unique fan-shaped foliage turns sparkling golden-yellow in fall, then all at once the leaves drop and within hours the tree is bare. Famous for their edible seeds and the infamous stinky fruit that encloses them. The flesh will actually rot off all on its own, leaving clean edible nuts with no bad smell. The softish nuts can be used in stir-fries. Leaf tea used to enhance circulation to the brain and extremities. Tolerates smoke, dust, wind, ice, insects, disease, salt. Prefers moist sandy neutral soils but is very adaptable. Minimal maintenance requirements, nearly indestructible, an excellent city tree. There are 3000-year-old specimens in China. Male and female tree required for fruit. These are unsexed seedlings. Native to southeastern China.Z3. (2-3')

06159 Ginkgo, $15.00

Gleditsia triacanthos **Honeylocust** 50' x 30-35' Beautiful fast-growing pyramidal leguminous nitrogen-fixing tree. Fragrant spring flowers. Bright green lacy leaves provide filtered light, making it good for "two-storey" agriculture or great shade for the lawn. Unlike black locust, the sugary pods are suitable for cattle or pig forage. You can even use them to make ethanol or, better yet, beer and wine. Traditionally pods were dried, ground and used in flour. Plant in full sun, any well-drained soil—even loves the sandy hills of Cape Cod. Transplants easily and tolerates drought, pollution, salt, disease and insects. Good for erosion control. Frequently used as a street tree. Not as weedy as the black locust and not on invasive species lists. Native to eastern U.S. Z4. ($^{1}/_{4}$-$^{1}/_{2}$" caliper transplants)

06162 Honeylocust, bundle of 5, $16.00



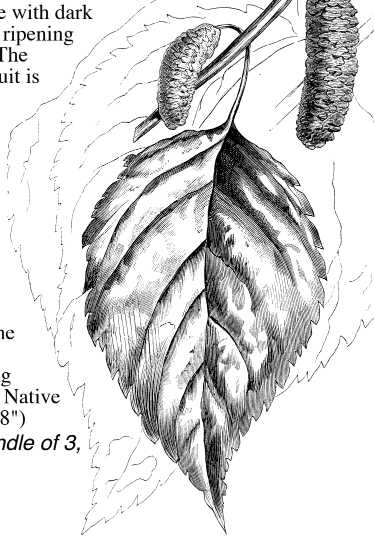


Juglans nigra **Black Walnut** 70-90' Magnificent open rounded crown of massive limbs with dark green leaves. A spectacular shade tree. Highly valued cabinet and veneer wood. Thick-shelled edible nuts have an intense distinctive flavor that some people dislike but others love. Husks, leaves and roots all have anti-fungal properties. Tincture made from the green husks is both anti-fungal and antiseptic. Husks also yield a rich brown dye. Deep taproot. Prefers moist well-drained soils, pH 6–7. Roots give off the juglone compound which inhibits competing plants, so don't plant one too close to your garden. Space trees about 50' apart for nut production, 20' apart for lumber. Native to eastern U.S. though not quite into Maine. Some sources say multiple trees needed for pollination but we've seen enough solo trees with large nut crops to say that you only need one. Z4. **ME Grown**. (24-36" transplants)

06185 Black Walnut, $14.00

Metasequoia glyptostroboides **Dawn Redwood** 100' One of the most spectacular of the ornamental trees. The wide irregular trunk looks like something out of a fairy tale with its iridescent golden-orange bark that becomes deeply grooved, hollowed and fluted with age. The bright green deciduous needles turn orange in the fall. Grows quickly, up to 50' in 15–20 years, with many small-diameter horizontal branches and a uniform conical habit. Highly adaptable, easy to transplant. Prefers moist deep well-drained slightly acid soil in full sun. Will tolerate wet or dry sites. Pollution resistant; good specimen or street tree, rarely needs pruning. Fossils dating back 50 million years have been found in Japan. Thought to be extinct until it was "rediscovered" in central China in 1941. Resembles California redwoods only vaguely. Native of China and Japan. Z4. (8-20")

06216 Dawn Redwood, $9.00



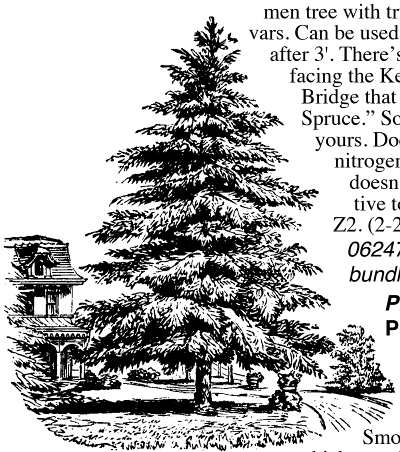
Morus rubra **Red Mulberry** 40-70' x 40-50' Tall open irregular native tree with dark purple juicy 1" blackberry-like fruit ripening over several weeks in midsummer. The sweet—some say insipid—edible fruit is suitable for fresh eating, pies, fruit leathers, smoothies, etc. Excellent forage crop for chickens, hogs, and others. Large attractive deep green foliage turns a muted yellow in fall. Don't make the mistake we made 25 years ago and plant it close to any other trees. Mulberries like plenty of room to spread out. Prefers rich moist soils. Best in full sun. Can be either dioecious or monoecious or even both on the same tree. A second tree is normally not necessary for pollination but planting more than one ensures good results. Native eastern and central U.S. Z4-5. (12-18")

06230 Red Mulberry, bundle of 3, $14.00

***Picea abies* Norway Spruce** 80' Fast-growing wide-spreading upright picturesque tree with graceful long pendulous branches that often reach the ground. Largest of the spruce. If you go to the Mt. Auburn Cemetery in Cambridge, MA, don't miss the ancient Norway Spruce just inside the front gate. Several of its massive drooping branches have themselves turned into secondary trunks. It is truly amazing. Orange-brown scaly bark. Excellent lumber. Showy (marketable!) 4–6" cones. Bright green foliage. Prefers loam but does better than other spruces on poorer soils. Native to northern Europe. Grown in Maine. Z2. (2-2TR, 9-18")

06244 Norway Spruce, bundle of 5, $14.00

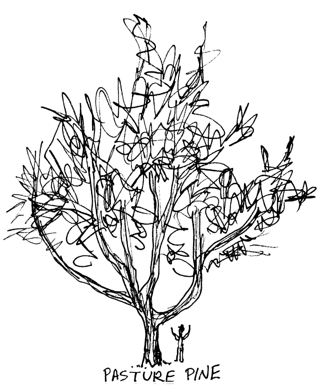
***P. pungens glauca* Colorado Blue Spruce** 30-60' Very popular specimen tree with truer blue foliage than other cultivars. Can be used as a screen, as it is fast growing after 3'. There's a beautiful specimen on a lawn facing the Kennebec River near the Hinckley Bridge that owners have dubbed "Bruce the Spruce." So lovely you might want to name yours. Does not like wet soil. Extra spring nitrogen will improve blue color, which doesn't appear for first few years. Native to western U.S. Grown in Maine. Z2. (2-2TR, 9-18")

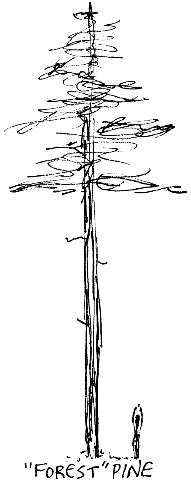


06247 Colorado Blue Spruce, bundle of 5, $14.00

***Pinus strobus* Eastern White Pine** 100'+ The largest northeastern conifer. Magnificent and massive when mature. 200 years ago the white pines in Maine were typically 250' tall. Smooth greyish-green bark becomes thick, rough and deeply furrowed with age. Medicinal teas are made from the blue-green needles. The resin has numerous practical and medicinal applications. Excellent wood with a thousand uses. When grown in abandoned fields it develops huge curving branches; grown in the forest it will typically be "clear" for the first 30–80'. Planted thick and sheared, it makes a beautiful hedge that will not drop its lower branches. Laws banning currants and gooseberries because of their threat to white pine are actually based on a myth. With the exception of black currant (*Ribes nigra*) it is fine to plant *Ribes* near pines. Perhaps it's the perfect "regulatory environment" to call the governor and request that this superfluous law be dumped. Likes ordinary to poor—even sandy—soil. Shade tolerant, but does not like salt or roadsides. Grows fast. Native to eastern U.S. Z3. (2-2TR, 9-18")

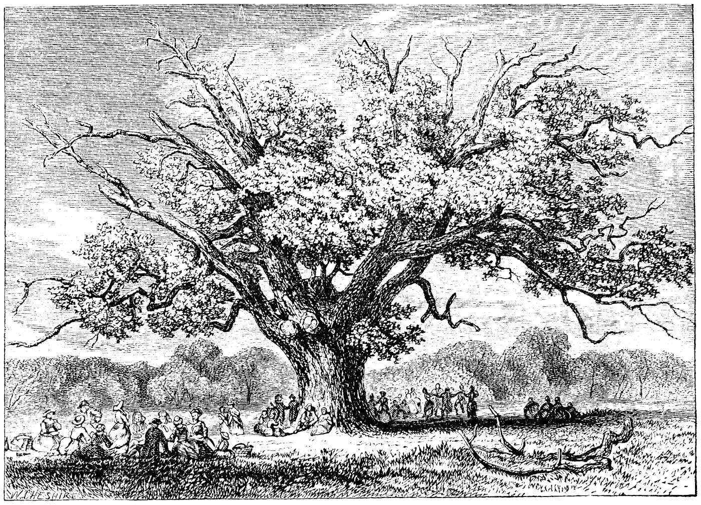
06289 Eastern White Pine, bundle of 5, $14.00





Agri-gel A hydrogel formulation which absorbs and holds water. The swollen crystals adhere to plant roots, reducing transplant shock. Safe, non-toxic, easy to use. Useful for garden seedlings as well as woody plants. Highly recommended for raspberries and conifers. Half-ounce packet mixed with one to three gallons of water will treat up to 100 cane plants, or 50 trees and shrubs. *Not allowed for organic certification.* $\frac{1}{2}$ oz.

7510 Agri-gel, $2.50

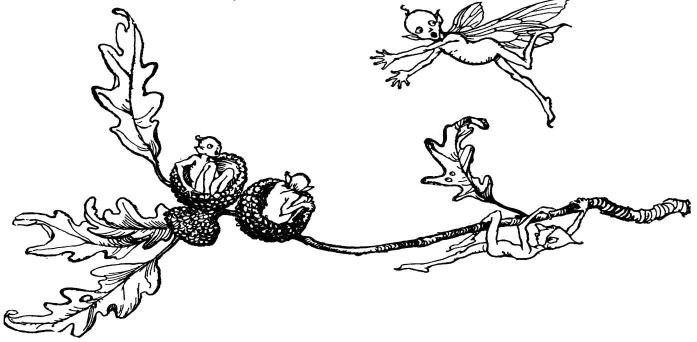


***Quercus* Oak** Many oaks are native to New England. They are generally divided into two groups: the reds and the whites. The reds have pointier leaves and the whites have rounder ones. Most of them make absolutely breath-taking shade trees, having the capacity to provide a major presence in almost any landscape. Some are nearly god-like in stature. All can be categorized as both edible and medicinal. The strongly astringent inner bark, foliage and acorn caps are all medicinal. Most importantly however, acorns were an extremely important human food-source for thousands of years.

Contrary to much of the literature, all acorns are edible, both reds and whites. When fresh, all of them are bitter, astringent, high in tannin, and basically inedible. There is no perfect edible acorn, ready to pop into your mouth right off the tree. All require substantial hot or cold leaching, a process that removes the tannins through repeated soaking or boiling. Once that's done, you're all set. The resulting mash can be dried and stored and used like flour or eaten as we might eat rice or oatmeal. High in starch and oil, moderate in protein. Storeable in the nut form for years. No tilling or weeding or soil erosion ever. Throw away the tractor. The perfect crop. For detailed instructions on acorn processing, see Samuel Thayer's book, *Nature's Garden*.

***Q. bicolor* Swamp White Oak** or **Bicolor Oak** 50-60' x same. A massive rounded shade tree with a short deeply ridged trunk and a fan of branches, the uppermost ascending and the lower drooping. The contrast between the light grey bark and the dark trunk fissures is particularly striking. Called Swamp White in recognition of its affinity for the wild low wetlands that once peppered eastern North America before the days of the parking lot and the big box. Called Bicolor because its large thick leathery lobed leaves have a glossy dark green upper surface and a white to greyish-green hairy felty underside. Its large $1\frac{1}{2}$" sweet acorns are highly attractive to wildlife, particularly waterfowl, sapsuckers and (ugh) squirrels. Its yellow to reddish-purple fall foliage persists until spring. Prefers moist acid soils where drainage is poor, but exhibits excellent drought resistance as well. Very fast growing once established. Native to northeastern U.S. Z3. **ME Grown.** (24-30" transplants)

06313 Swamp White Oak, $14.00

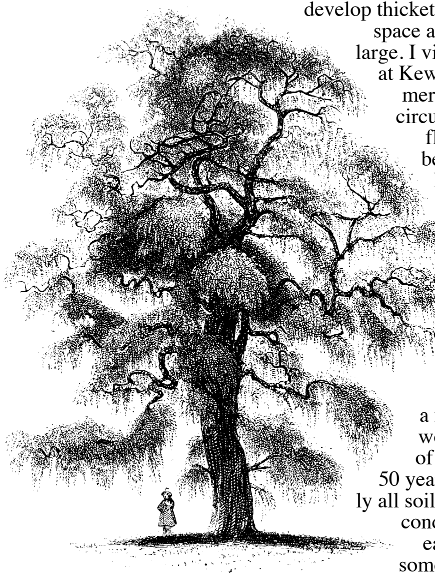


***Q. macrocarpa* Bur Oak** 70-80' x same. Hardiest of the white oaks with a furrowed and massive trunk, and a wide-spreading crown of huge branches. The trunk is the most imposing of all our northern oaks and the bark is the most deeply grooved. This is a spectacular tree. The habit is upright and somewhat vase-shaped. Lustrous dark green foliage 4–12" long. Small branches are distinctively corky, winged, and tend to twist and kink. Large 1–2" acorns almost entirely enclosed in a fringed cup. These are edible and low in tannic acid; when roasted they supposedly make a decent coffee substitute. The bark is astringent and antiseptic. Needs full sun. Tolerates clay soils, dry to moist, acid to alkaline. The most urban-tolerant oak. Pyramidal in youth. Fairly fast growing. Native of eastern U.S. and Canada. Z3.

06323 Bur Oak, $25.00

***Q. rubra* Red Oak** 60-80' Also called **Northern Red Oak**. The most common oak in northern New England and a common tree in central Maine. Typically a single large trunk dividing into several large ascending spreading branches. While the branches are not as massive as some of the other oaks, its open rounded crown is magnificent. The trunk is a deep grey textured web of surfaces overlaid one upon another. Sharply toothed foliage turns orange-tan during apple season. The 1" acorns were a staple food of pre-contact North Americans; now they are mostly left to the wildlife. They sprout with ease more or less wherever they land. Fast growing, up to two feet per year. Prefers well-drained sandy slightly acid soils. Those on our farm thrive in the shallow ledgey ground. Tolerates shade, compacted soil, salt, pollution and other urban conditions. Native to eastern U.S. Z4. **ME Grown.** (1-5')

06330 Red Oak, $14.00

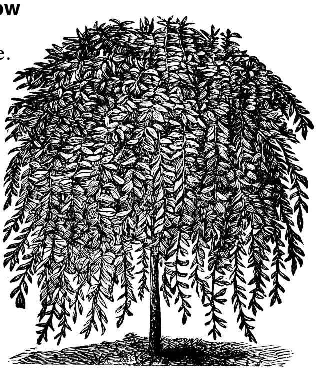


***Robinia pseudoacacia* Black Locust** 30-50' x same. A very fast-growing upright nitrogen-fixing, leguminous tree with a narrow crown. Will develop thickets from seed and suckers. With space and time it can grow to be very large. I visited two immense specimens at Kew Gardens in London last summer. One of them measured 18' in circumference! Extremely fragrant flowers in early summer attract bees and make excellent honey. Edible flowers can be enjoyed fresh or frozen, or made into sauces, ice cream or wine. Other parts of the plant are not edible; do not plant in or near pastures as it is poisonous to horses and cattle. Considered one of the best of all boat-building woods and an excellent firewood. Plant a few trees and you'll have firewood for life. Fence posts made of black locust last an incredible 50 years or more. Adaptable to nearly all soils and can survive the toughest conditions. Although native to the eastern U.S, it does show up on some invasive species lists. Check with local extension for more information. Z3. (1-3')

06340 Black Locust, bundle of 5, $16.00

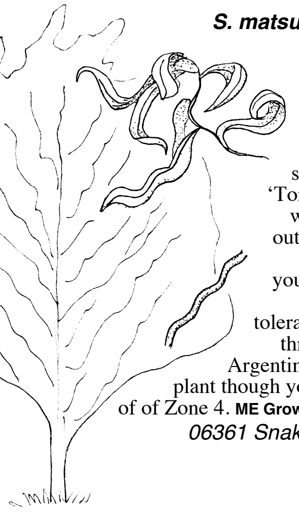
***Salix* spp. Cape Rosier Basket Willow** 50' more or less. If you're looking to make a basket, a bowl or maybe a boat, this could be the only material you need. Beautiful subtly golden-colored basket willow propagated from the old Nearing Homestead on Cape Rosier, ME. Their trees are pollarded, a European pruning technique of severely cutting back the main branches to enhance the formation of long whips for basket-making. This enables easy annual spring harvesting and controls the size of the tree. In time, the trees develop a gnarly head which has great character. Stanley Joseph, homesteader on Cape Rosier and neighbor of the Nearings, used this willow for many years to make everything from baskets to the traditional Irish boat, the coracle. Nearly 30 years ago, with Stanley's encouragement, I first planted basket willows on our farm in Palermo. Prefers sun and moist soils. *Z4.* **ME Grown.** (3-4')

06343 Cape Rosier Basket Willow, $17.00



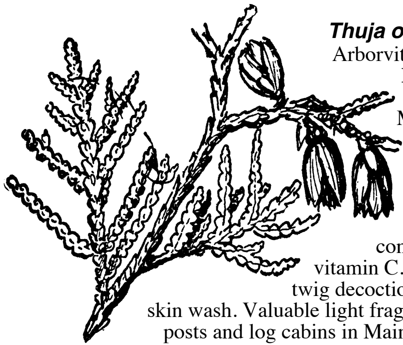
***S. alba* 'Tristis' Niobe Weeping Willow** 50x50' The classic weeping willow, a very large majestic graceful wide-spreading tree. Golden drooping branches, which can hang to the ground, are used for basket weaving; golden bark and leaves used medicinally. All parts of the tree, especially the bark, contain salicin, used for pain and fever relief for hundreds, or even thousands, of years and the primary ingredient in aspirin. Easily transplanted and fast growing. Prefers sun and moist soils. Native to southern Europe and western Asia. Z4. **ME Grown.** ($2^{1}/_{2}$-5')

06355 Niobe Weeping Willow, $12.00



***S. matsudana* 'Snake' WIllow** 30-50' A fast-growing wide oval tree with distinctively curled wiggled and twisted branches. The twigs look like sine waves—or maybe the stock market. Even the foliage loops and curls. 'Snake' is a selection of the standard contorted 'Tortuosa' willow with an even more wildly branching habit. Interesting outside in the yard and beautiful in a wreath or a vase. Quite nice as a young specimen. Keep it pruned and keep it small if you like. Drought tolerant though, like the other willows, thrives in moist locations. Native to Argentina. Generally considered a Zone 5 plant though you might find it does well in parts of of Zone 4. **ME Grown.** (4-5')

06361 Snake Willow, $12.00



***Thuja occidentalis* Arborvitae** 20-60' Arborvitae means tree of life. Also called **Eastern White Cedar**. Common throughout the entire state of Maine although some stands have been depleted by overcutting. Narrow and tall with twiggy branches, soft fibrous orange-brown bark, and flat foliage unlike that of any other conifer. Foliage and bark tea high in vitamin C. Foliage tea helpful in infections, twig decoction makes an anti-viral anti-fungal skin wash. Valuable light fragrant wood, the standard for fence posts and log cabins in Maine. Slow growing, lives up to 400 years. Thrives in rich moist marshy neutral-to-alkaline soils. Good for screens and hedges. Probably the first North American tree brought to Europe. Next time you're on Mount Desert, check out Thuja Gardens: beautiful cedars surrounding even more beautiful flower gardens. While you're there, visit Asticou Azalea Gardens, just down the road. Grown in Maine. Z2. (P+2, 9-18")

06376 Arborvitae, bundle of 5, $14.00

***Tilia americana* American Linden** 60-80' x same. Also known as **Basswood**. Tall stately tree with rounded crown and numerous low-hung spreading branches. Sweetly fragrant yellow June flowers will attract all the bees in the neighborhood, are reputed to make the best honey, and also make a popular after-dinner tea and stomach remedy. The young half-size foliage makes a high quality salad green. Young fruit and flowers can be ground into a paste as a chocolate substitute. Excellent soft carving wood with "no grain." The name may be a corruption of "bastwood" meaning cordage or textile fiber. The inner bark, tough and fibrous, is used for ropes and nets. Woodworkers love to use a small piece of the inner bark as a "glue brush." Yellow fall color. Prefers deep rich moist soils with a pH slightly alkaline. Full sun or partial shade. Sensitive to salt and pollution. May live for 900 years. Native from New Brunswick to VA. Z3. **ME Grown.** (2-3' transplants)

06384 American Linden, $13.00

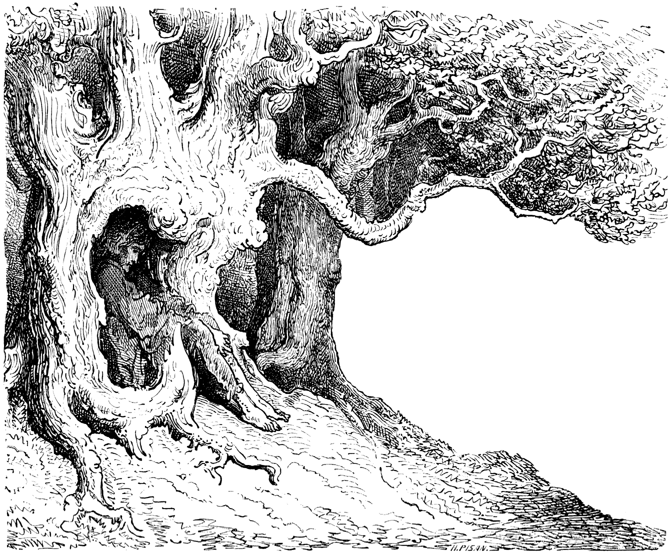
***T. cordata* Littleleaf Linden** 60-70' x 30-45' Absolutely excellent all-around shade tree for the yard, office, mall, or even the White House lawn. Medium-fast growing, upright oval; conical when young. You can shear it into a hedge as is sometimes done in Europe. Very fragrant yellowish flowers attract bees. Heart-shaped foliage. Easy to transplant. Prefers moist deep fertile soil and full sun, but adapts to pH, compaction and shade. Somewhat sensitive to drought and salt. Subject to Japanese beetle, though control measures are seldom needed. Native of Europe. Hardy in all of Maine. Z3. **ME Grown.** (24-30")

06386 Littleleaf Linden, $13.00

How the Micmac collect bark for medicine

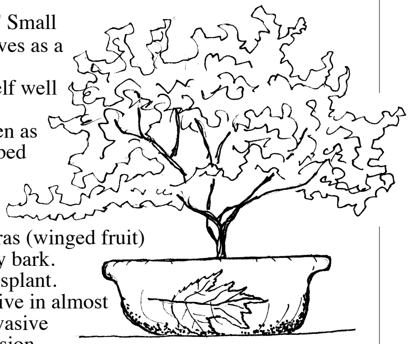
My mother usually only gathered barks when she had a use for them. She believed that if you collected medicines when you didn't need them, you were inviting sickness into your life.…She used to pray before she did anything else.…Then she collected the medicines. She would always use bark from the part of the tree on which the sun was shining, and gathered it in the morning or early afternoon if she could. Mother always said to get the bark from the east or south sides of the tree, because it was the best for medicine.…She emphasized that [the bark] should be cut, peeled and scraped in a motion away from the body towards the roots. "This shows that the illness is leaving the body of the sick person," she explained.

from *Micmac Medicines, Remedies and Recollections* by Laurie Lacey (pp 46-7)



Small Trees

Not so massive as the Big Pappys or the CC Sabathias, these are the Dustin Pedroias of the tree world, who even at a diminutive five foot six, was voted MVP in 2008. Like their big brothers, the small trees play an integral role in the landscape. They do all the same things as the big boys but top out at a saner size. These are edibles, medicinals and ornamentals. They do very well in the small yard or larger landscape as specimens, in groves, or blended into the forest edge. We list them separately here to remind ourselves of how important the little guy can be.



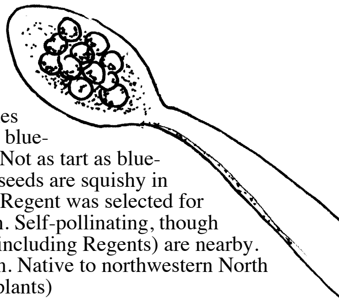
***Acer ginnala* Amur Maple** 15'-18' Small graceful multi-stemmed tree that thrives as a single specimen or in groups. Has a naturally rounded form and lends itself well to pruning and shaping, making it excellent to grow in containers or even as a bonsai plant. Glossy green three-lobed foliage turns yellow and red in fall. Bees love the fragrant creamy-white flowers. Magnificent in summer and into fall when its pink ripening samaras (winged fruit) cover the tree. Attractive smooth grey bark. Full sun to partial shade. Easy to transplant. Prefers well-drained soil, but will thrive in almost any soil and pH level. Considered invasive in some areas; check with your extension agent. Native to east Asia. Z2.

06423 Amur Maple, $13.00

Amelanchier Very hardy genus of spring-flowering shrubs and small trees with blueberry-like sweet edible berries. Native to the northern hemisphere, especially the U.S. and Canada. Northern New England has many. There has never been agreement about the number of species in the genus: accounts range from a half dozen to over thirty. Some are relatively easy to identify while others are nearly impossible. On top of that, some cross readily with one another creating numerous natural hybrids. Many common names are used pretty much interchangeably including **Juneberry**, **Parsonberry**, **Serviceberry**, **Saskatoon**, **Shadblow**, **Shadbush**, **Shad**. Distinctive rusty-orange foliage and 5-petaled white flowers are beautiful in spring. Nice red-orange fall color. All the Amelanchiers are useful for the edible landscaper. Berries good in pies, cobblers, jellies, jams, smoothies and cakes. Used by native peoples of the western prairies to make pemmican. Popular with wildlife. Thrives along stream beds as well as on rocky slopes. Tolerates partial shade, salt, pollution and wet spots but not standing water. Usually considered to be self-fruitful although we recommend planting with other Amelanchiers for pollination. No serious insect or disease problems.

***A. laevis* Allegheny Serviceberry** 20-40' x 15-20' Also called **Shadbush**. The most common Amelanchier in Maine. The unique orange-bronzed color of the unfolding leaves on this small tree is one of my favorite spring sights. The foliage is followed by pendulous white blossoms followed by dark-purplish berries that ripen in midsummer. Likes well-drained acid soils along the edge of fields, streams and roads. Native midwest to eastern U.S. and Canada. Z2. **ME Grown.** (18-30" transplants)

06431 Allegheny Serviceberry, $13.00

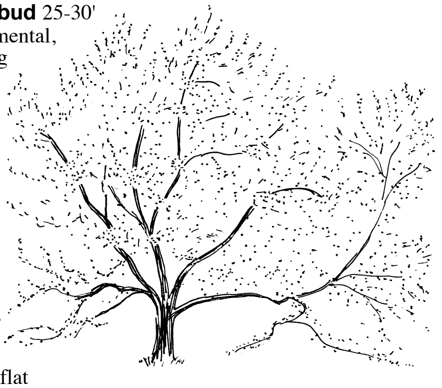


***A. alnifolia* 'Regent' Juneberry** 4-6' Also called **Western Serviceberry**, **Saskatoon** or **Shadbush**. J Candrian introduction, Regent, ND. Compact shrub form with fragrant white flowers in early spring and dark blue berries in mid July in central Maine. (Maybe June farther south!) The berries are about the size of a small highbush blueberry or a typical lowbush blueberry. Not as tart as blueberries and a bit seedier—though the seeds are squishy in your mouth, not like raspberry seeds. Regent was selected for excellent foliage and berry production. Self-pollinating, though fruiting may improve if more plants (including Regents) are nearby. Prefers fertile, neutral soil and full sun. Native to northwestern North America.Z2. **ME Grown.** (15-18" transplants)

06444 Regent Juneberry, $13.00

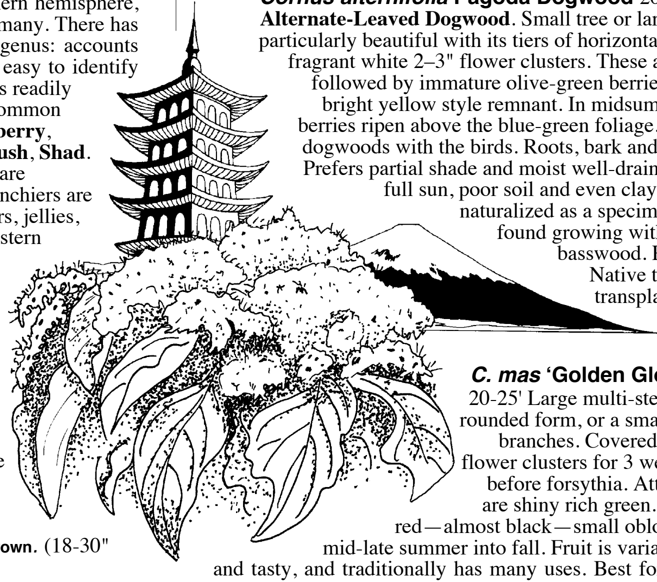
***A. canadensis* Canada Shadbush** 6-20' Usually a rather short multi-stemmed suckering shrub. Not really a tree, but often confused with *A. arborea*. The *canadensis* in bloom along with its rusty foliage is one of the wonderful signs of spring in Maine. Same purpley-black sweet juicy "Juneberries" as the others, though generally not cultivated for the fruit. Some say early settlers named it Serviceberry because when it blooms, the ground is thawed enough to hold a burial service for those who didn't survive the winter. Likes well-drained acid soils. Native from Maine to South Carolina. Z3. **ME Grown.** (20-24")

06448 Canada Shadbush, $13.00



***Cercis canadensis* Redbud** 25-30' x same. Small, highly ornamental, vase-shaped, nitrogen-fixing tree with edible flowers and seeds. In early spring, clusters of small brilliant purplish-pink pea-like flowers are so abundant they fill the entire tree; they dot the branches and even come right out of the trunk. A valuable early-season bee nectar plant. Large heart-shaped leaves emerge opaque pink, mature to deep green and turn yellow in fall. Flowers edible raw or cooked. 2–3" flat leguminous pods with roastable edible seeds high in antioxidants. Our nursery stock comes from Minnesota and has shown to be hardy. Customers report that it is reliably blooming in Zone 4. If you have experience with redbuds in northern areas, please let us know. We are looking for trees with ironclad bloom. We'd like to propagate using the hardiest seed. Sun or partial shade, soil adaptable. Fine as a specimen tree or in groups. May need sweating before planting to break dormancy, instructions on page 4. Native to central and eastern U.S. Z4. **ME Grown.** (18"-3')

06461 Redbud, $16.00



***Cornus alternifolia* Pagoda Dogwood** 20' x 30-35' Also known as **Alternate-Leaved Dogwood**. Small tree or large multi-stemmed shrub, particularly beautiful with its tiers of horizontal branches and extremely fragrant white 2–3" flower clusters. These appear in mid-late spring, followed by immature olive-green berries, each tipped with a tiny bright yellow style remnant. In midsummer clusters of dark blue berries ripen above the blue-green foliage. One of the most popular dogwoods with the birds. Roots, bark and inner bark all medicinal. Prefers partial shade and moist well-drained acid soil, but tolerates full sun, poor soil and even clay. pH adaptable. Excellent naturalized as a specimen or in groups and often found growing with sugar maple, beech and basswood. Reddish-purple fall color. Native to eastern U.S. Z3. (9-32" transplants)

06467 Pagoda Dogwood, $14.00

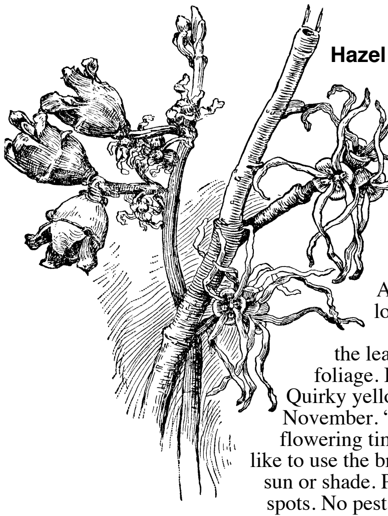
***C. mas* 'Golden Glory' Cornelian Cherry** 20-25' Large multi-stemmed shrub with oval to rounded form, or a small tree if you prune lower branches. Covered with small bright yellow flower clusters for 3 weeks in early spring, even before forsythia. Attractive long ovate leaves are shiny rich green. Bears profusions of dark red—almost black—small oblong cherry-like fruit from mid-late summer into fall. Fruit is variable but can be sweet, tart and tasty, and traditionally has many uses. Best for fresh eating when dark red and slightly soft. Glory was selected for landscaping rather then fruit. Blooms prolifically making it a good pollinator for other varieties. We are currently trialing a number of varieties and are teaching ourselves to graft them. Stay tuned. Folkloric use for skin disorders, joint pains and stomach upset. Extremely tough useful wood. Flakey exfoliating bark. Easy to grow, pest- and fungus-free and very long lived. Excellent as a hedge or specimen. Prefers well-drained soils but adapts to most soils, city conditions, even shade. Drought tolerant. Pest problems negligible. Resistant to deer browsing. Fruit buds tend to escape early spring frosts although they can be injured in colder areas. Self-pollinating, though pollination may improve with more trees. Native to eastern Europe and western Asia. Z4. (9-12" transplants)

06482 Golden Glory Cornelian Cherry, $14.00

***Crataegus laevigata* 'Superba' Crimson Cloud Hawthorn** 15-20' x 12-18' (Charles X x Paul's Scarlet) Princeton Nursery Introduction, NJ, 1966. A selection of English Hawthorn with an attractive freely unkempt rounded form and remarkably beautiful large single bright red flowers, each centered with a white star. Formerly named *C. oxyacantha*, this is the species usually mentioned in herbal medical texts. Flowers and glossy red persistent fruit valued as a cardiac and circulatory tonic. (The tea is good for your heart!) Deep dark green leaves resist the leaf-spot diseases typical of many hawthorns. Nearly thornless. Thrives in most sites and soils. pH adaptable. Native of Europe and North Africa. Z4. (3-4')

06494 Crimson Cloud Hawthorn, $22.00

ME Grown = grown in
Maine by a member of
the Fedco growers coop

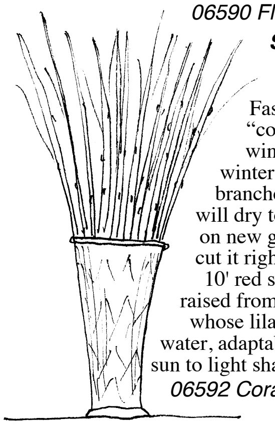


***Hamamelis virginiana* Witch Hazel** 20-30' A small irregular rounded fall-flowering medicinal tree or large shrub. Makes a soothing astringent with a seemingly endless number of uses from controlling acne to soothing diaper rash, baggy eyes (yes!), poison ivy, chicken pox, even an unhappy lovelife. T.N. Dickinson's Witch Hazel Astringent is still available in your local drug store. Most preparations involve simply brewing tea from the leaves and/or twigs. Oval hazel-like foliage. Brilliant golden-yellow fall color. Quirky yellow flowers appear in early to mid November. "Witch" is said to refer to the odd flowering time or maybe it's because dowsers like to use the branches to "witch" for water. Full sun or shade. Prefers moist acid soils; avoid dry spots. No pests or diseases, does well with very little care. We do nothing to ours and it looks better and better every year. Native Canada to Georgia. Z3. **ME Grown**. (9-30" transplants)

06537 Witch Hazel, $15.00

***Salix alba* 'Flame' Willow** 12' x same. A small ornamental multi-trunked tree or large shrub prized for its new stems that turn red to orange-red in winter. Can be used as a substitute for red dogwood. To maximize the effect, prune annually in late winter to about a foot tall. Or do nothing and you'll wind up with a nice small tree. Very narrow lance-shaped finely-toothed light green foliage turns yellow in fall. Fast growing, can produce 6–8' of new growth each year. Look out sceptic fields! Soil adaptable but prefers it moist or even wet. Full sun to light shade. Quite hardy. Z2. **ME Grown**.

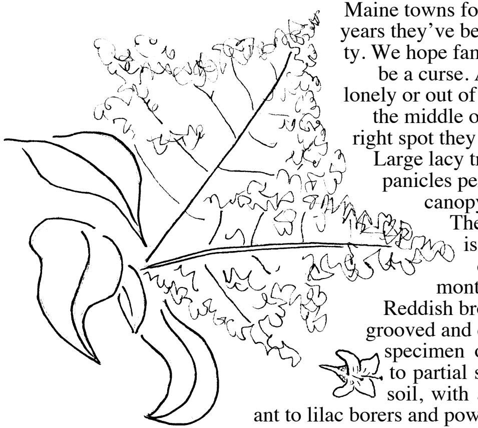
06590 Flame Willow, $12.00



S. alba* 'Britzensis' Coral Bark Willow** 15-30' x 12-15' Späth intro, Britz, Germany, 1878. Also called ***S. a. var. ***vitellina* 'Britzensis'**. Fast-growing shrubby tree with highly ornamental "coral" red bark. Especially beautiful in the snowy winter landscape. Recommended for filling the winter flower vase. No water: just set the dormant branches in the vase and enjoy. The deep red stems will dry to a rusty red. Because the color is most striking on new growth, give it an annual spring pruning or even cut it right to the ground. Every spring you'll get new 5–10' red stems. Typically narrow *Salix* leaves. Originally raised from seed by the famous nurseryman Ludwig Späth whose lilac (**#5960**) is one of *the* all-time favorites. Likes water, adaptable to a wide range of soils and conditions. Full sun to light shade. Z2. **ME Grown**. (1½-3')

06592 Coral Bark Willow, $12.00

***Syringa reticulata* Japanese Tree Lilac** 20-30' x 15-25' Small rounded irregular flowering tree "cousin" of the shrub lilacs. A common sight in most Maine towns for generations. In recent years they've been gaining in popularity. We hope fame and reliability won't be a curse. Although they can look lonely or out of place plunked down in the middle of a mowed lawn, in the right spot they are a lovely small tree. Large lacy triangular creamy-white panicles perch vibrantly above the canopy of dark green foliage. Their wonderful fragrance is reminiscent of almond extract. Blooms a good month after the shrub lilacs. Reddish brown cherry-like bark is grooved and checked. Beautiful as a specimen or in groups. Full sun to partial shade and well-drained soil, with a pH of 6.5–8. Resistant to lilac borers and powdery mildew. Salt- and drought-tolerant. Requires no pruning or fertilizing as far as I can tell. I haven't done a thing to ours and it looks great. Native of Japan. See page 44 for other lilacs. Z3. **ME Grown**. (24-48")



06617 Japanese Tree Lilac, $15.00

Malus Flowering and Culinary Crabapples

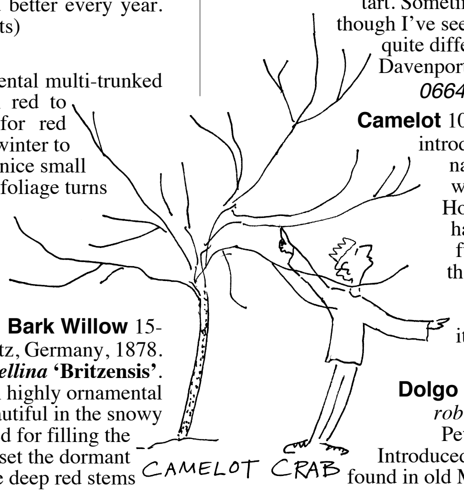
A crabapple is an apple with fruit smaller than 2" in diameter. Of the 20 plus recognized species of apples, most are considered to be crabs. Every year we vary our offering to provide an ever-expanding assortment of the best culinary and ornamental varieties. We usually include a couple of tried-and-true standards in the trade. However we mostly offer lesser-known varieties including some that are extremely rare. We're always on the lookout for crabs with four-season interest: magnificent spring blooms, clean vibrant summer foliage, showy fall and winter fruit, and interesting shapes and branching habits year-round. We like those with persistent fruit to attract birds all winter. We also like those with edible fruit. We always limit pruning our crabs to a touch-up here and there, allowing each to express its unique identity.

The best crab collection in New England is at the Arnold Arboretum in Boston. The best book is John Fiala's definitive text, *Flowering Crabapples: The Genus Malus*.

Most crabapples bloom annually in May just before the lilacs and make excellent pollinators for any apple. (3½-6' trees)

Alamata Late Summer. (Beautiful Arcade x Fluke 38 crab) NE Hansen introduction, South Dakota Exp Stn, Brookings, SD, 1942. Fruit the size of a Ping-Pong ball, red with a greyish bloom. Red-fleshed red-leafed red-flowering, suitable for pickling, jelly, sauce and cider. Mix it with cranberries or with other apples. Fruit can also be eaten fresh if you like it tart. Sometimes thought to be *M. pumila* 'Niedzwetzkyana' although I've seen both and I don't think so; Alamata appears to be quite different. Fluke 38 is a selection made by NK Fluke of Davenport, Iowa. Z3/4. **ME Grown**.

06646 Alamata, $24.00



Camelot 10x8' Also known as *M.* **'Camzam**,' James Zampini introduction, Lake County Nursery, Perry, OH, 1994. A natural dwarf. My introduction to this excellent crab was a highlight of my visit last spring to Dr. George Holmes' crab and lilac collection in Belfast. Camelot has single whitish-pinkish flowers. The catalogs say fuchsia-pink blooms that are tinted white. I can buy that. Really nice, ragged, open wide-spreading form. Persistent medium-sized burgundy fruit. Disease resistant. Valuable both as an ornamental and for its wildlife value. Z4.

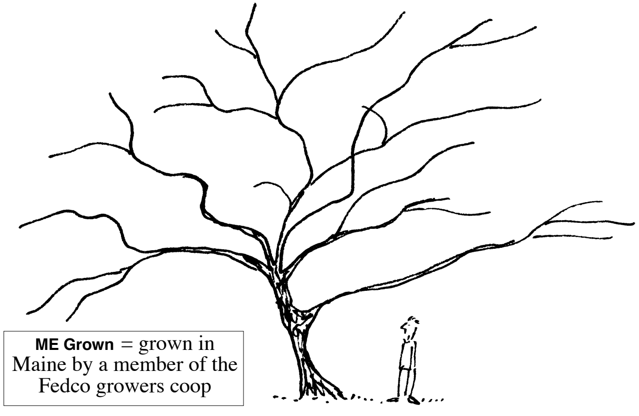
06681 Camelot, $24.00

Dolgo 25x30' From seed collected by NE Hansen of *M.* x *robusta* in 1897 at the Imperial Botanical Gardens, St. Petersburg, Russia. (*Dolgo* means 'long' in Russian.) Introduced in the U.S. in 1917. *The* classic culinary crab still found in old Maine backyards. Apricot-pink buds, large fragrant 2" pure white single flowers bloom early. Beautiful purple-red 1½" tear-drop-shaped fruit makes flavorful clear ruby-red jelly. In recent years the aromatic very sweet, very acidic fruit has found favor with hard cider makers. Also useful for canning, pickling and delicious sauce. One individual posted on the NAFEX chat group, "The apple sauce is spectacular, and sweet enough to enjoy without sugar." Vigorous large blocky upright spreading tree consistently yields abundant summer crops. Dependable pollinator for all apples. Very hardy. Z2. **ME Grown**.

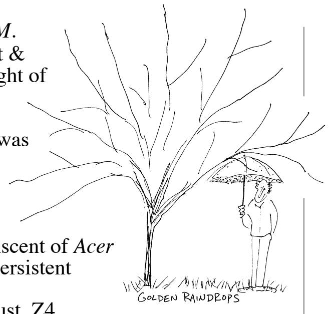
06717 Dolgo, $24.00

Donald Wyman 20x30' Chance seedling. Arnold Arboretum, 1970. If I could plant only one ornamental crab, I would plant a Donald Wyman. Deep pink buds and large 2" single white flowers early in the season. The bloom is so intense, the tree looks like one massive flower. Beautiful rounded wide-spreading medium-sized tree with attractive glossy green foliage. Looks great when it has room to spread out. The shape alone is enough to recommend this cultivar. The bright ⅜" red oval fruit completely covers the tree in clusters and persists until spring when the birds clean it off in time for the next bloom. 2001 winner of the Carey Award for Distinctive Plants for New England. Named in honor of America's great horticulturist. Disease-free, although said to be slightly susceptible to powdery mildew. Z4. **ME Grown**.

06719 Donald Wyman, $24.00

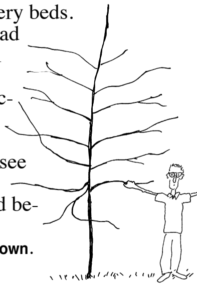


ME Grown = grown in Maine by a member of the Fedco growers coop



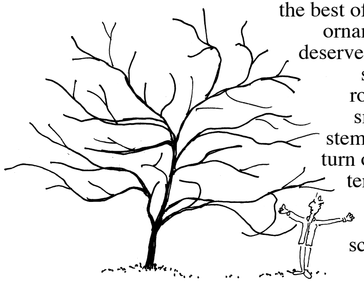
Golden Raindrops 20x20' Also known as *M. transitoria* 'Schmidtcutleaf', J. Frank Schmidt & Son introduction, Boring, OR. Another highlight of Dr. Holmes' collection is this crab. George's comment: "It does everything well." When I visited last spring the dense full rounded tree was living up to its reputation. It was absolutely covered with bees. It was also covered with very white single star-like flowers. A bit of green peeked through here and there. Deeply cut finely textured dark green foliage—reminiscent of *Acer ginnala*—turns yellow in fall. Bright yellow persistent fruits will attract the waxwings among others. Excellent resistance to scab and cedar-apple rust. Z4.

06740 Golden Raindrops, $28.00



Henry Luce 20x30'(?) Unknown parentage. Roger Luce introduction, Newburgh, ME, c. 1995. Light pink blossoms, bronze-reddish foliage and 1" dark-red-fleshed fruit for jellies and wildlife. Slightly teardrop-shaped fruit with deep-red skin. A chance seedling discovered by Roger Luce where it was leaning out of one of his old overgrown nursery beds. When I first saw it, it was just a single leggy branch that had wiggled its way out of the jungle. Roger gave us a handful of fruit one day when we were visiting and we gave him back a single jar of beautiful clear red jelly. I say "introduction" by Roger though he never actually did so. However, he did name the tree after his brother. Shortly after Roger's passing, I planted a specimen on our farm. I hoped to see what it would look like given a bit of open ground, something he was never able to do. Now ours is pushing 16' and beginning to show its true self. It's open and spreading with wide-angled branches, covered with fruit most years. Z4. **ME Grown**.

06751 Henry Luce, $24.00

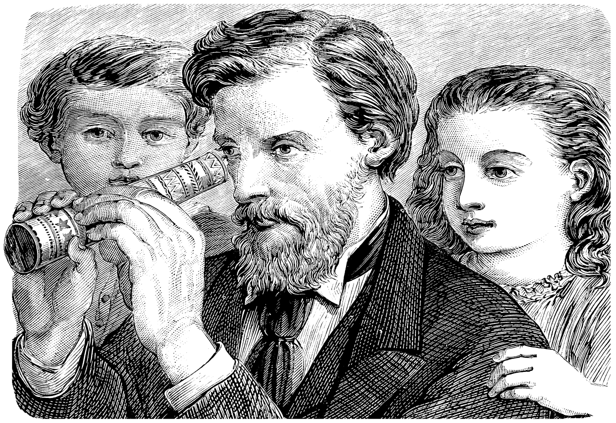


Indian Magic 15x15' Robert Simpson introduction, Vincennes, IN. One of the best of the the pinks, an outstanding showy ornamental tree. Well known with a well-deserved great reputation. Beautiful in every season. Red buds open to single deep rose-pink flowers. Abundant attractive small elliptical bright glossy red long-stemmed fruits with a slight orange blush turn orange in late fall and persist all winter, attracting birds. Dark green foliage turns brilliant orange in fall. Rounded open form. Rarely affected by scab. Midseason bloom. Z4. **ME Grown**.

06762 Indian Magic, $24.00

Kaleidoscope 16' x same. GV 22. Seedling of van Eseltine. Henry Ross introduction, Gardenview Horticultural Park, Strongsville, OH, 2003. Sister seedling of Ross's Double Red. Flowers are very similar. Henry wrote to me, "The flowers appear mostly in huge panicles at the ends of the branches." A kaleidoscope of dark pink, light pink and white blossoms all share the tree simultaneously. Attractive small dark red $\frac{1}{2}$" fruit. Bronze foliage. Loose rounded spreading open form. Another Fedco exclusive. Probably hardy to Z3 or 4. **ME Grown**.

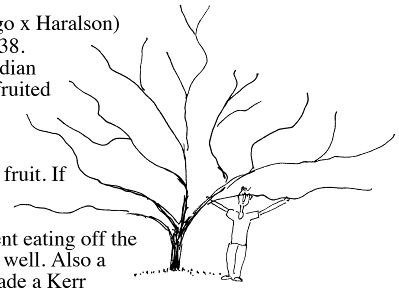
06770 Kaleidoscope, $24.00



Crabapples are really just apples in disguise. They prefer full sun and deep well-drained soils of 5.5–6.5 pH but they are quite forgiving and will thrive in many locations with a little TLC. They don't like to be drowned or starved for water, and they do need to be protected from borers, mice and deer. See page 6. Planting instructions on page 5.

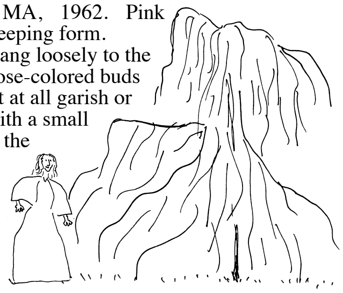
Pruning Crabapples

Most crabapples require little or no pruning except when a branch is broken or you feel compelled to shape your tree in one way or another. Allow each tree to assume its own unique form. Weeping crabs however do require pruning and training: see sidebar for guidance.



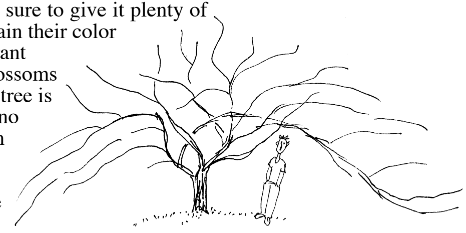
Kerr 20x24' Morden 352 (Dolgo x Haralson) Morden, Manitoba, Canada, 1938. Introduced by the famous Canadian plant breeder WL Kerr. Large-fruited crab with a multitude of uses. Heavy annual bloom of single white flowers followed in late summer by firm deep red ovate fruit. If heavily thinned, the fruit can approach 2" in diameter, but $1\frac{1}{2}$" is more typical. Very decent eating off the tree, better after storage. Keeps well. Also a very good culinary crab. We made a Kerr brandy that was exceedingly tasty and not at all too sweet. Pack the crabs in a mason jar with a dollop of sugar and cover with your favorite vodka. Let stand a year or two; flip it upside-down now and then. Extremely productive and precocious, somewhat spreading vigorous medium-sized tree. Exceedingly hardy. Z3 or maybe even Z2. **ME Grown**.

06773 Kerr, $24.00



Louisa 15x15' Introduced by Polly Hill and named for her daughter. Martha's Vineyard, MA, 1962. Pink flowering, with an umbrella-shaped weeping form. Branches arch very slightly and then hang loosely to the ground and will sway in the breeze. Rose-colored buds open to cheerful true pink flowers. Not at all garish or mauve. Very small lemon-gold fruit with a small rose blush. Dark green foliage. One of the highlights of a visit to the Polly Hill Arboretum on the Vineyard was seeing and photographing the original tree. Still surprisingly small after nearly 60 years. Disease resistant. Z4. **ME Grown**.

06784 Louisa, $24.00



Mary Potter 15x30' AA 17039 (*M. sargentii* 'Rosea' x *M.* x *atrosanguinea*) Karl Sax intro, Arnold Arboretum, Boston, MA, 1939. A magnificent and rare variety with an apricot-white bloom, a beautiful shape and masses of red persistent fruit for the birds. While the tree itself is relatively low in stature, it is quite wide-spreading with branches that broadly arch to the ground and then sweep upward. Be sure to give it plenty of space. The red buds retain their color while the strongly fragrant single creamy-white blossoms open. In full bloom the tree is a mass of flowers with no foliage visible at all. On top of that, the bright yellow stamens add an apricot hue to the entire tree in bloom. Spectacular! A must for every crab collection. Z4.

06797 Mary Potter, $24.00

Old Warehouse 25x20' Unknown parentage. Fedco Trees introduction, Bellsqueeze Rd, Clinton, ME, 2012. Large pink buds followed by large single white flowers. Blooms midseason, just after the Trees crew has packed up and left the dark cold wet warehouse for another season, about the third week of May. The white bloom contrasts with the bright green foliage. The bees love it in May and the jays love it in January. Large upright somewhat rounded form. A fixture outside the Fedco Seeds Warehouse in Clinton, where Fedco Trees operated for 20 years. We'll miss the warehouse and we'll miss the tree. Alternate bearer. **ME Grown**.

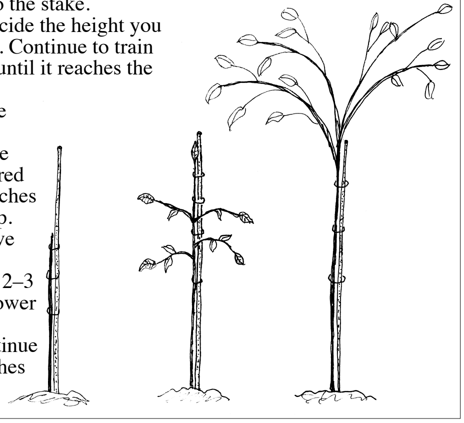
06821 Old Warehouse, $24.00

Training Your Weeping Crab

First summer: Stake the tree and do not prune at all. Staking keeps the the tree from weeping before reaching the desired height. Tie the tip of the central leader snugly to the stake.

Second summer: Decide the height you want weeping to begin. Continue to train the leader to the stake until it reaches the desired height. Leave some, but not all, of the lower branches.

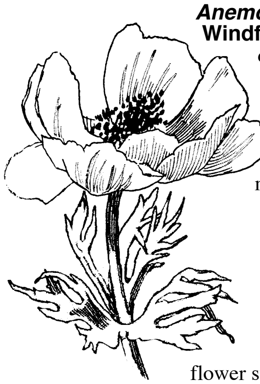
Later years: Once the leader reaches the desired height, let several branches form and begin to weep. (The nicest weepers I've seen begin weeping at about 6–8' high.) Over 2–3 years, remove all the lower branches. Eventually remove the stake. Continue to remove lower branches as necessary.



Tender Summer Bulbs are like fall-planted bulbs in that they give you an impressive floral display for comparatively little effort. Bulbs, corms and tubers store their energy requiring only some earth, moisture and sun to be released. Unlike fall bulbs, they are not hardy in our climate. Energetic people lift and store them over the winter (details below); the rest of us treat them as annuals. Each selection is offered in three different quantities; note the different item number for each package size.

***Acidanthera murielæ* Fragrant Gladiolus** or **Ethiopian Gladiolus** produces sword-like foliage topped by wonderfully scented star-shaped 2" white flowers with mahogany-purple centers on arching stems. Beautiful in the garden or as a cutflower. 24" tall. Culture like gladiolus.

***7601**: 10 for $3.50*
***7602**: 20 for $5.50*
***7603**: 50 for $12.00*



***Anemone coronaria* De Caen mix Anemone** or **Windflower** Charming single flowers 1–3" wide are dark purple-blue, red, rose or white and appear in early summer. Good for borders, containers and cutting. 8–10" tall. Soak knobby tubers in water 24 hours before early-spring planting 1–2" deep, 4–8" apart. Anemones enjoy full sun and light sandy soil but must be kept moist during the growing season.

***7611**: 10 for $4.25*
***7612**: 20 for $7.25*
***7613**: 50 for $15.50*

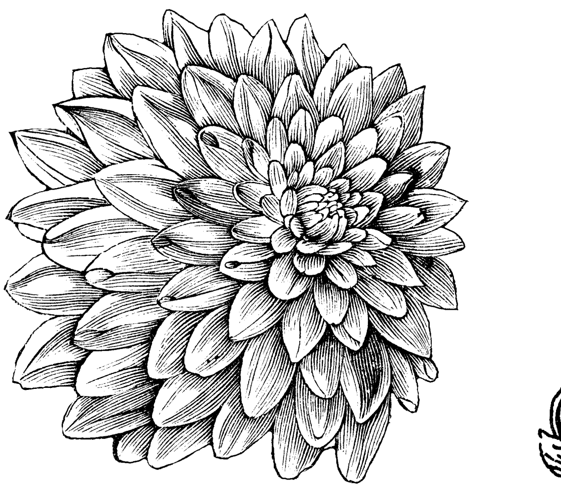
***Crocosmia* x *crocosmiiflora* 'Lucifer'** glows in the garden or makes a long-lasting cutflower. Midsummer sprays of bright red flowers open from bottom to top on curving flower stalks, like bursts of flame above gladiolus-like foliage. *Lucifer* means *light-bearing* in Latin and refers to the blossoms' resemblance to lighted matches. Grows well in pots. 24–36" tall. Plant 3" deep, 3" apart in moist well-drained soil.

***7621**: 10 for $4.00*
***7622**: 20 for $7.50*
***7623**: 50 for $15.00*

Dahlia Bushy bedding plant and prolific cutflower producer blooms from midsummer until frost. Native to hot parts of the Americas and first developed as a food crop, ornamental dahlias are descended from years of breeding and hybridizing *D. pinnata* and *D. juarezi*. Once again Earl Waterman grew this year's mixes at his Roadtown Dahlia Patch in Shutesbury, MA. These are large tubers.

***D.* 'Babylon Purple'** Stunning deep fuschia 5–6" wide dinnerplate blooms. 44–48" tall.

***7631**: 1 for $4.00*
***7632**: 3 for $11.00*
***7633**: 6 for $19.00*



***D.* 'Mystery Day'** Our customers love this classic two-toned dinnerplate variety! Burgundy-red with white tips. Flowers up to 6" across. 32–40" tall.

***7641**: 1 for $4.00*
***7642**: 3 for $11.00*
***7643**: 6 for $18.50*

***Dahlia* Earl's Medium Mix** Earl assures us that this mix "will not disappoint" and "if you like bicolors, then you will like the choices." Lots of good sturdy plants that will work in a rock garden or border. Flowers run around 4–5" on plants ranging 2–3' tall.

***7651**: 2 for $6.50*
***7652**: 4 for $11.00*
***7653**: 8 for $19.50*

***D.* Earl's Tall Mix** As popular as ever in its 14th year on our list, mix includes pink, yellow, light purple, white, red and dark red 3–6" flowers, pompon and decorative (standard) styles. This year I planted one in a large pot, kept it well watered, and by early August already had beautiful dark red blooms. Plants 2–4' tall.

***7661**: 2 for $6.50*
***7662**: 4 for $11.00*
***7663**: 8 for $19.50*

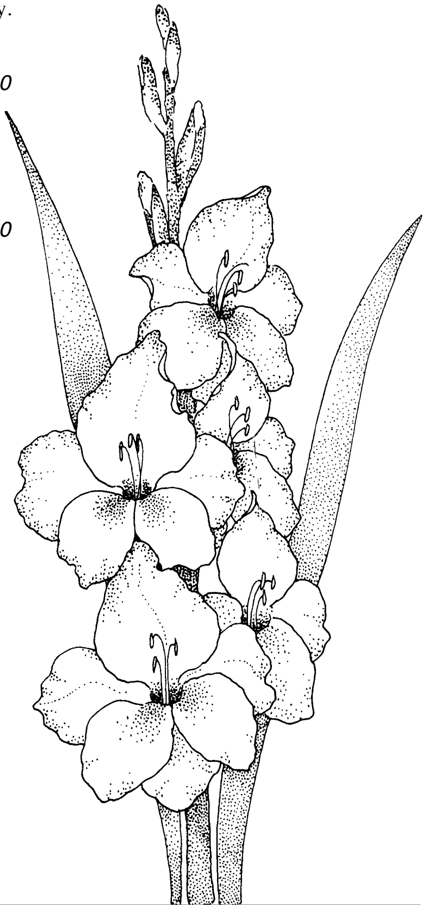
***Gladiolus* Sword Lily** Showy summer bloomer excels as a cutflower. Each 36" tall stalk is covered with 10 or more open funnel-shaped flowers that bloom from bottom to top. Named for the their sword-like leaves; a *gladiolus* was a small Roman sword. Gladiolus bulbs are 1$^{1}/_{2}$" and up.

***G.* 'Carmello'** rich golden-orange, very bright and showy.

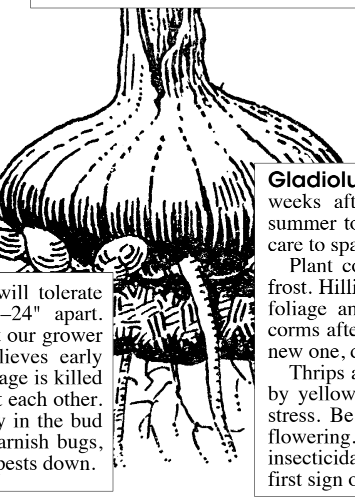
***7671**: 10 for $4.50*
***7672**: 20 for $8.00*
***7673**: 50 for $18.00*

***G.* 'Early Bird'** light shell pink, somewhat ruffled.

***7681**: 10 for $4.50*
***7682**: 20 for $8.00*
***7683**: 50 for $18.00*



Overwintering Summer Bulbs
In our climate, these tender spring-planted summer-blooming bulbs, corms and tubers will not survive the winter outdoors. To save them for next year, dig them up in the fall after the foliage dies, gently brush off any soil and debris, and dry them. Store somewhere dark and cool (40–50°) in dry peat or sawdust, then replant in spring. You can also grow them in pots and relocate as the weather dictates. Alternatively, treat them as annuals and compost them at the end of the season.



Dahlia Grows best with 3–4 hours of direct sun per day, but will tolerate conditions from full sun to light shade. Plant 3–4" deep, 12–24" apart. Conventional wisdom says to plant after danger of frost is past, but our grower in Massachusetts plants his the same time as his peas. He believes early planting is important and says the plants will recover if the first foliage is killed by frost. Dahlias often need staking, but close plantings can support each other. Because dahlia blooms are susceptible to insect damage, especially in the bud stage, think out a control program ahead of time. Watch out for tarnish bugs, leaf hoppers and thrips. Frequently picking the flowers keeps some pests down.

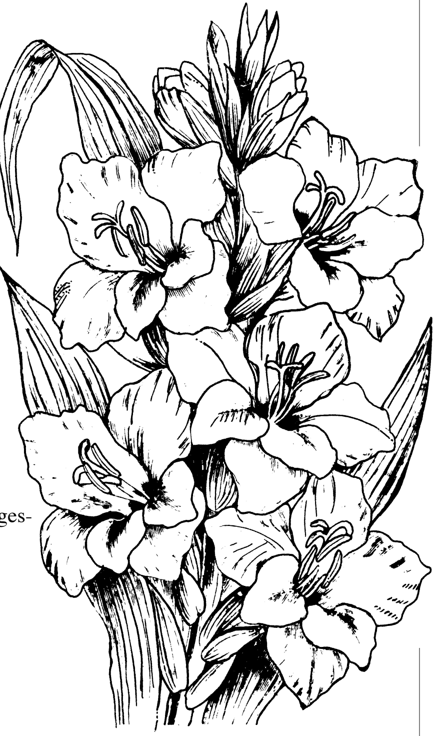
Gladiolus Each stalk blooms for about a week, about 8 weeks after planting. Stagger plantings for flowers from summer to frost. Cut when 2–3 flowers have opened, taking care to spare the leaves which feed the developing corm.

Plant corms 4–6" deep and 6" apart after the last spring frost. Hilling or staking may be needed if their sword-shaped foliage and 3–4' flower spikes get top heavy. Dig up the corms after the tops have died, discard the old one, clean the new one, dry, and store loose (no peat) in a cool dry place.

Thrips are a problem for glads, and infestations—indicated by yellowing and spotted foliage—are aggravated by water stress. Be prepared lest they harm your plants and prevent flowering. Consider a control program —possibilities include insecticidal soap, garlic, pyrethrum or rotenone—to use at the first sign of infestation.

***G.* 'Forentina White'** white with a narrow red center stripe.

7691: *10 for $4.50*
7692: *20 for $8.00*
7693: *50 for $18.00*



***G.* 'Jester'** yellow and frilly with a splash of red-orange at the center.

7701: *10 for $4.50*
7702: *20 for $8.00*
7703: *50 for $18.00*

***G.* 'Nori'** violet-blue with prominent cream-colored blotch.

7711: *10 for $4.50*
7712: *20 for $8.00*
7713: *50 for $18.00*

***G.* 'Plum Tart'** a dark purplish wine, very classy.

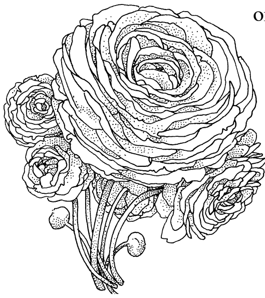
7721: *10 for $4.50*
7722: *20 for $8.00*
7723: *50 for $18.00*

***G.* 'Raven'** dark red with a suggestion of black.

7731: *10 for $4.50*
7732: *20 for $8.00*
7733: *50 for $18.00*

Large-Flowering Glad Mix

7741: *10 for $4.00*
7742: *20 for $7.50*
7743: *50 for $15.50*

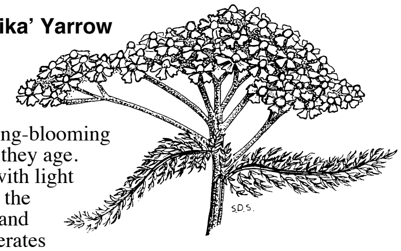


***Ranunculus* Hybrids Mix** Orange, white, yellow, pink, or red flowers resemble big double buttercups and bloom from late spring into summer, Good for borders, pots and cutting. Fern-like foliage. 12" tall. When Ranunculus appears at the florist in late winter, I go nuts and completely forget my budget! Before planting, soak tubers in water for several hours to several days. They need drainage, but respond well to lots of moisture. Set 2–4" deep, 6" apart, claw side down.

7751: *6 for $3.50*
7752: *12 for $6.50*
7753: *24 for $10.50*

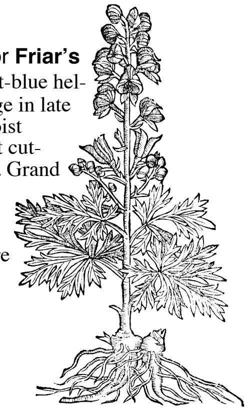
Herbaceous Perennial Plants

Most of the perennial plants we offer are hardy at least into Zone 4. USDA hardiness zone (chart on page 7) follows each description. See below for planting instructions. The list is alphabetized by botanical names, in italics, followed by common names. Each selection is offered in three different quantities; note the different item number for each package size.



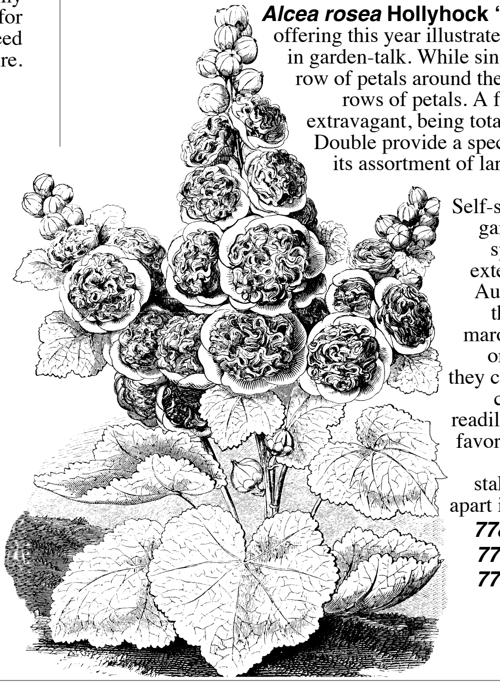
***Achillea millefolium* 'Paprika' Yarrow** produces 2–4" flat-topped red flower heads, each tiny flower with a minute yellow center. Silvery-grey foliage is finely cut and feathery. Handsome long-blooming flower clusters fade to pink as they age. However, planting in an area with light afternoon shade could prolong the bright color. Has a spicy odor and attracts butterflies. Yarrow tolerates most conditions, is untroubled by pests and is a stand-out in heat and drought. Excellent for fresh and dried arrangements. 18–36" tall. Plant crowns 12–24" apart in full sun to partial shade. Z3.

7761: *1 for $4.75*
7762: *3 for $12.50*
7763: *6 for $21.50*



***Aconitum napellus* English Monkshood** or **Friar's Cap** produces dense showy spikes of deep violet-blue helmet-shaped flowers above elegant palmate foliage in late summer. Plant in a partially shaded, cool and moist location for longest-lasting flowers. An excellent cut-flower—cut when 1/3 to 1/2 the spike is in bloom. Grand delphinium-style blooms rarely need staking. I love watching bumblebees climb under the hood and completely disappear into the flowers then clamber out again covered with pollen. The entire plant is poisonous; wash your hands after handling or cutting. 36–40" tall. Plant 15–20" apart in moist soil. Z3.

7771: *1 for $3.00*
7772: *3 for $7.50*
7773: *6 for $12.00*



***Alcea rosea* Hollyhock 'Chater's Double' Mix** Our offering this year illustrates the meaning of **fully double** in garden-talk. While single flowers have, yes, a single row of petals around their centers, doubles have *many* rows of petals. A fully double flower is the most extravagant, being totally filled with petals. Chater's Double provide a spectacular excess of bloom, with its assortment of large fully double hemispherical flowers in mixed colors. Self-sowing staple of old-fashioned gardens, hollyhocks produce tall spires covered with flowers for extended bloom through July and August. Colors range from white through the pinks into rose and maroon with an occasional yellow or salmon. Officially perennial, they can be short-lived, and are best cultivated as a biennials which readily self-sow once established in favorable conditions. Like full sun. 4–6' tall. Wind protection or staking is essential. Plant 12–18" apart in moist well-drained soil. Z3.

7781: *1 for $3.75*
7782: *3 for $10.00*
7783: *6 for $18.00*

Planting Instructions for Bare-Root Perennial Plants

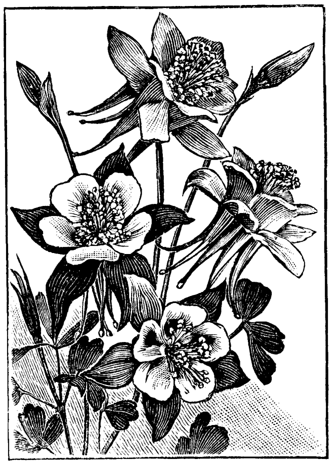
Treat bare-root perennials and plugs like tender annuals for their first growing season, when they typically focus on root growth. Once established, usually in the second year, they are vigorous and floriferous.

When you receive your order, open the bags and check the stock immediately. Roots and crowns should be firm and pliable, not soft or brittle. If they are slightly dry, add a little water or, if they are going to be potted up soon, soak the roots. Generally, a little surface mold is harmless and will not affect the plant's future performance. If you cannot pot them up immediately, store them in a cool (35–40°) location for a short time.

Pot up the rootstock in well-drained potting mix. Most plants need a deep 6" pot or a 1-gallon container. Avoid coiling the roots in the bottom of under-sized containers. Grow newly potted perennials for a few weeks in a protected location in indirect light at 50-60° and keep from freezing. Wet and/or cold conditions for an extended period may cause rotting. Begin feeding when new growth appears. Keep dry fertilizers away from plant crowns. Use animal manures with caution as they can promote fungal and bacterial diseases.

Transplant outside once they show some top growth and the danger of frost has passed. Dig a hole about twice the size of the pot, loosening the surrounding soil and adding compost or fertilizers as necessary. Generally, plant the top of the crown just below ground level, less than an inch from the surface of the soil.

Nearly all perennials appreciate a fall mulch and a sidedressing of compost or leaf mold in the spring.

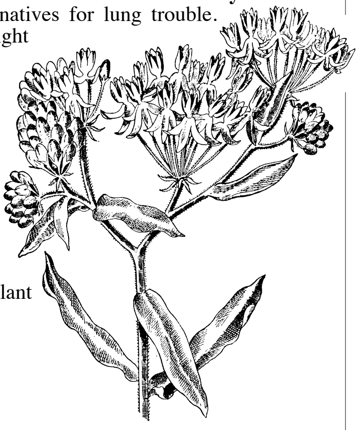


Aquilegia vulgaris 'Biedermeier Mix' Columbine In early spring round-lobed leaves emerge in little stacks which unfurl prettily, when not much else is green. Soon after, flowers dance above the foliage on vertical stems. This hybrid produces lovely spurred double and single star-shaped upward-facing flowers in late spring and early summer. Mix includes bright shades of violet, cream, lilac, pink and deep red. Good for a cutting garden or border. Tolerates full sun but prefers partial shade, which prolongs flowering season. Plant in light soil with adequate humus, moisture and drainage. 12–18" tall.

We are excited about our newest MOFGA-certified organic perennial supplier: Ripley Farm in Dover-Foxcroft. Nestled in the wooded hills of the Highlands Region are the one-and-a-half acres of fields where Mary Margaret and Gene Ripley grow their robust healthy perennials plants along with a wide array of vegetables for market using excellent sustainable practices. They are supplying us with this delightful columbine mix as well as several other offerings throughout this section. Z3. **ME Grown.**

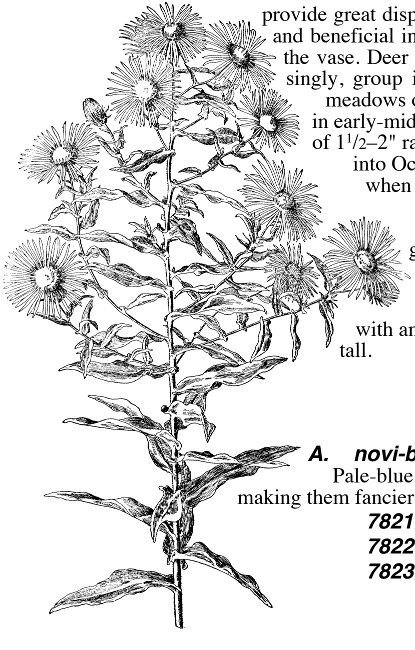
7791*: 1 for $5.75*
7792*: 2 for $11.00*
7793*: 3 for $15.00*

Asclepias tuberosa Butterfly Weed Also known as **Pleurisy Root** and formerly used by American natives for lung trouble. This ornamental native plant provides bright tangerine-orange flowers in 5" clusters from midsummer into fall. Monarch butterflies lay their eggs on these plants; including them in the garden should increase your butterfly population. The fleshy taproot requires well-drained fertile soil and will not tolerate clay or low ground. In my Dexter garden, there is a hardy patch thriving in a sunny border in front of a stand of Echinacea—the bright orange and pink complement each other nicely. 24" tall, plant 18–24" apart in full sun. See page 62, Cultivating Sanctuary, for additional information. Z4. **UpS "To-Watch" list.**



7801*: 1 for $4.50*
7802*: 3 for $12.00*
7803*: 6 for $21.00*

Aster Starwort or Frost Flower Familiar summer and fall wildflowers throughout the Northeast. These cultivars are selected for outstanding color and form but are still robust and easy to grow. Asters provide great displays in fall, attract butterflies and beneficial insects, and last a long time in the vase. Deer don't usually eat them. Plant singly, group in a border, or naturalize in meadows or on banks. Cut back slightly in early-mid June to induce an abundance of 1½–2" rayed blooms from late August into October. Asters are at their peak when most plants have faded. Plant 12–18" apart in light moist humusy soil in full sun with good air circulation. Z4.



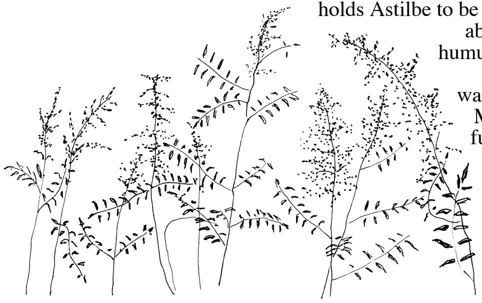
A. novae-angliae 'Purple Dome' Deep purple flowers with an excellent compact habit. 18" tall.

7811*: 1 for $5.25*
7812*: 3 for $13.50*
7813*: 6 for $24.00*

A. novi-belgii 'Marie Ballard' Pale-blue luminous flowers are double, making them fancier than most asters. 35–40" tall.

7821*: 1 for $5.25*
7822*: 3 for $13.50*
7823*: 6 for $24.00*

Astilbe Feather Flower or False Spirea lends a novel touch to the border and is easy to grow, hardy and long-lived. Long-lasting plumes of feathery flowers are good for drying and provide an interesting contrast to more ordinary petaled blossoms. Elegant fern-like foliage forms an attractive clump all season and comes in a wide range of sizes and shades. Convention holds Astilbe to be a partial-shade plant that absolutely requires a moist humusy acid soil when grown in full sun. That's true in warmer areas, but in central Maine it seems to tolerate full sun in a wide range of conditions. Blooms July and August. Said to be deer-resistant. Stock has 2–3 "eyes." Plant 12–18" apart and divide clumps every few years. Z4.



A. arendsii 'Fanal' Classic favorite with dark red flowers and an upright perky habit. Glossy foliage is mahogany-red in spring, dark green in summer. Early-midseason. 18–24" tall.

7831*: 1 for $3.00*
7832*: 3 for $7.50*
7833*: 6 for $12.00*

A. japonica 'Peach Blossom' Delicate and airy, light peach-pink plumes held high above medium-green foliage move gracefully with the slightest breeze. Early-mid season. 20–24" tall.

7841*: 1 for $3.00*
7842*: 3 for $7.50*
7843*: 6 for $12.50*

Baptisia australis Blue False Indigo 2010 Perennial Plant of the Year. A stand-out in the garden because of its blue lupine-like flowers in early summer. Herbaceous perennial with a bushy habit will have a shrub-like structure once mature and be 3–5' tall. Appropriate for native wildflower gardens. Its dried seed pods turn black and provide an interesting element in dried arrangements. Lovely North American native used to be grown as a more affordable dye plant substitute for indigo, hence its common name. Baptisia is a member of the pea family and you'll notice a resemblance in its foliage and flowers, as well as its fondness for cooler weather. Plant 3' apart in full sun and dryish soil. 3–4' tall and just as wide. Our stock is 3" plugs. Z3.

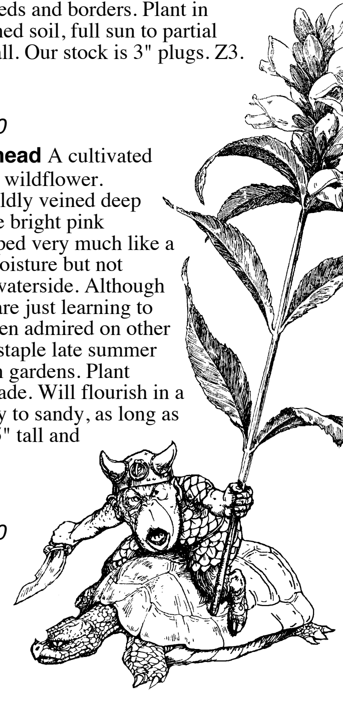
7851*: 1 for $5.25*
7852*: 2 for $9.50*
7853*: 3 for $13.00*

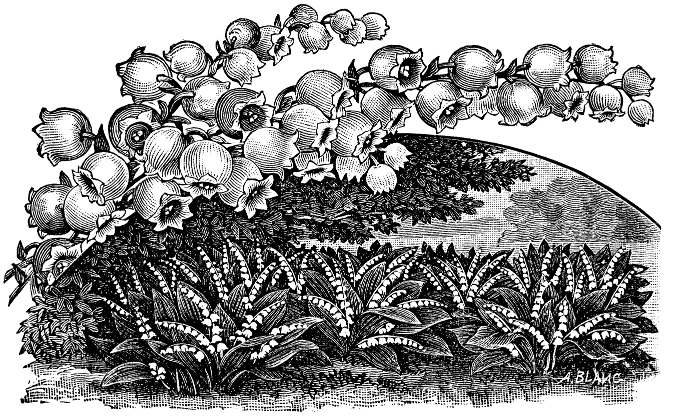
Bergenia cordifolia 'Red Beauty' Naturally found in Siberia, this tough perennial has glossy leathery cabbage-like leaves which are evergreen in warmer climates and very long-lasting in ours. Burgundy-green in summer, the rounded foliage often becomes more purple in cooler months. In spring, several knee-high thick reddish stems are topped with many nodding rosy flowers. But the foliage is the main attraction, adding substance and interesting textures to beds and borders. Plant in humus-rich moist well-drained soil, full sun to partial shade, 6–8" apart. 12–15" tall. Our stock is 3" plugs. Z3.

7861*: 1 for $3.50*
7862*: 3 for $8.00*
7863*: 6 for $14.50*

Chelone obliqua Turtlehead A cultivated version of the unique native wildflower. Bears upright stems with boldly veined deep green leaves topped by large bright pink hooded flowers that are shaped very much like a turtle's head. Will handle moisture but not boggy spots. Perfect at the waterside. Although North American gardeners are just learning to use them, they have long been admired on other continents. Turtleheads are staple late summer and fall flowers in European gardens. Plant about 12" apart in partial shade. Will flourish in a wide range of soil, from clay to sandy, as long as it's not water-logged. 23–35" tall and 18–23" wide. Z4.

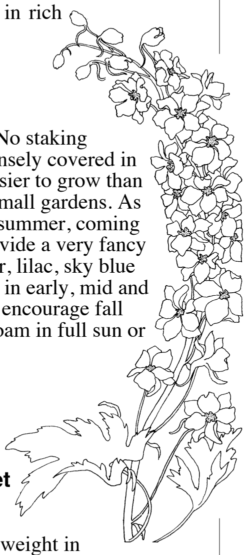
7871*: 1 for $3.00*
7872*: 3 for $7.50*
7873*: 6 for $12.00*





Convallaria majalis **Lily of the Valley** A top-seller for all the many years that we've listed it. Makes a hardy bedding or border plant and an excellent ground cover, even in dry shady areas. Easy to grow under any conditions, but prefers partial to full shade. Produces long stems of bell-shaped fragrant white flowers in late spring-early summer, followed by small orange berries. Intense fragrance and delicate shape add welcome notes to bouquets. Potentially toxic and irritating to skin. Advisable to wear gloves when handling. Plant pips 2" deep, 3–5" apart in rich moist soil. 6–8" tall. Z2.

7881: *5 for $4.25*
7882: *10 for $7.50*
7883: *25 for $17.50*

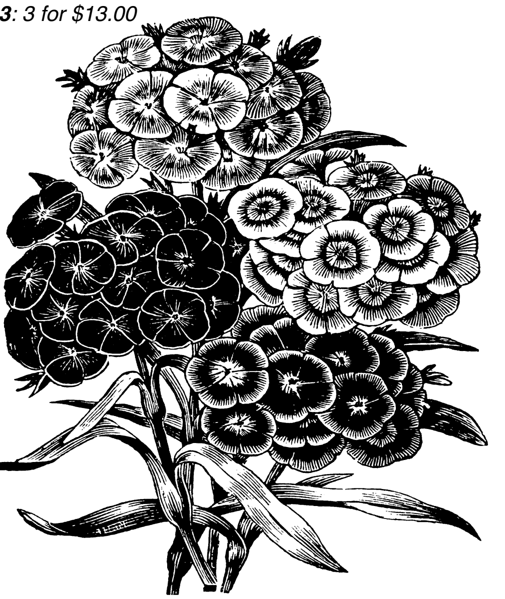


Delphinium **'Magic Fountains' Mix Delphinium** No staking needed for these sturdy early-summer 28–36" spikes densely covered in flowers. The Magic Fountain series is long-lived and easier to grow than the big delphiniums, making it a wonderful choice for small gardens. As they get established they make a larger spectacle every summer, coming to rival the big ones for profusion of lavish flowers. Provide a very fancy addition to bouquets. Mix includes white, pink, lavender, lilac, sky blue and dark blue. They are heavy feeders: sidedress lightly in early, mid and late spring for best show. Remove spent flowerstalks to encourage fall rebloom. Plant 12–24" apart in highly fertile non-acid loam in full sun or light shade. Our plants this year are in 3" plugs. Z3.

7891: *1 for $4.00*
7892: *3 for $9.50*
7893: *6 for $17.50*

Dianthus barbatus **'Single Finest Mixture' Sweet William** A traditional cottage garden plant with beautiful dense scented flowerheads. These short-lived perennials or biennials are charming plants, worth their weight in gold in the border, attracting butterflies and hummingbirds, not to mention people cutting flowers for arangements. A classic mix of colors: red, white, rosy pink, pale pink, and a bicolor red and white. Your original plants will eventually die back but the patch will continue to thrive because Sweet William reseeds abundantly. At my house, it grows right in the grass as a wildflower patch. 18–24" tall. Our stock is MOFGA-certified organic, grown by Ripley Farm in Dover-Foxcroft.

7901: *1 for $5.50*
7902: *2 for $9.75*
7903: *3 for $13.00*

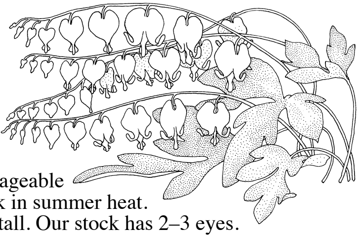


Dicentra **Bleeding Heart** Graceful racemes arch over clumps of attractive cut foliage. Distinctively shaped flowers dangle in a row on each raceme like charms on a bracelet. Hardy long-lived plant when it gets rich moist soil and partial shade. Z3.

D. formosa **'Luxuriant' Western Bleeding Heart** Blooms all summer and tolerates heat and drought better than any other *Dicentra*. Cherry red flowers defy the elements as they dangle above lush finely cut light green foliage which is pretty as a fern's. Excellent border plant with spreading habit, 12–15" tall.

7911: *1 for $4.50*
7912: *3 for $12.00*
7913: *6 for $21.00*

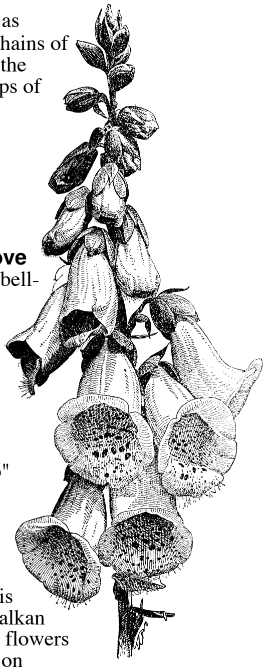
D. spectabilis **Old-Fashioned Bleeding Heart** Old garden favorite delights every spring with pink heart-shaped flowers with white detail. Blooms with late tulips and complements them well. Also useful for cutting. Prefers plenty of room to bush out. Mine surprised both me and its neighbors when it became over 6' wide in two years. I moved it rather unceremoniously to a less hospitable spot and it has been manageable ever since. Foliage tends to die back in summer heat. Plant 2–4" deep, 24" apart. 30–36" tall. Our stock has 2–3 eyes.



7921: *1 for $3.75*
7922: *3 for $9.00*
7923: *6 for $15.50*

D. s. Alba **White Bleeding Heart** Every bit as charming as the pink bleeding heart, Alba has chains of *white* heart-shaped flowers that dangle beneath the arching leafless stems. Forms large bushy clumps of light green foliage. Plant 2–4" deep, 24" apart. 30–36" tall. Our stock has 2–3 eyes.

7931: *1 for $4.00*
7932: *3 for $9.50*
7933: *6 for $15.75*

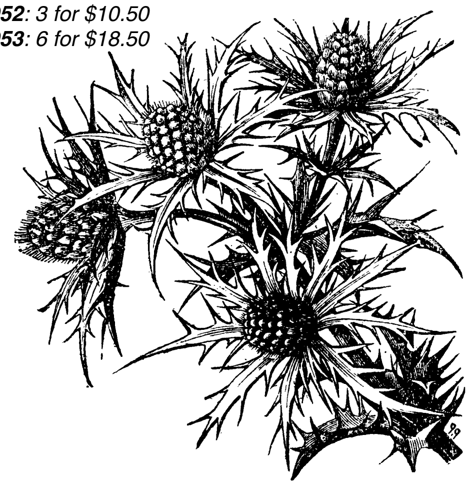


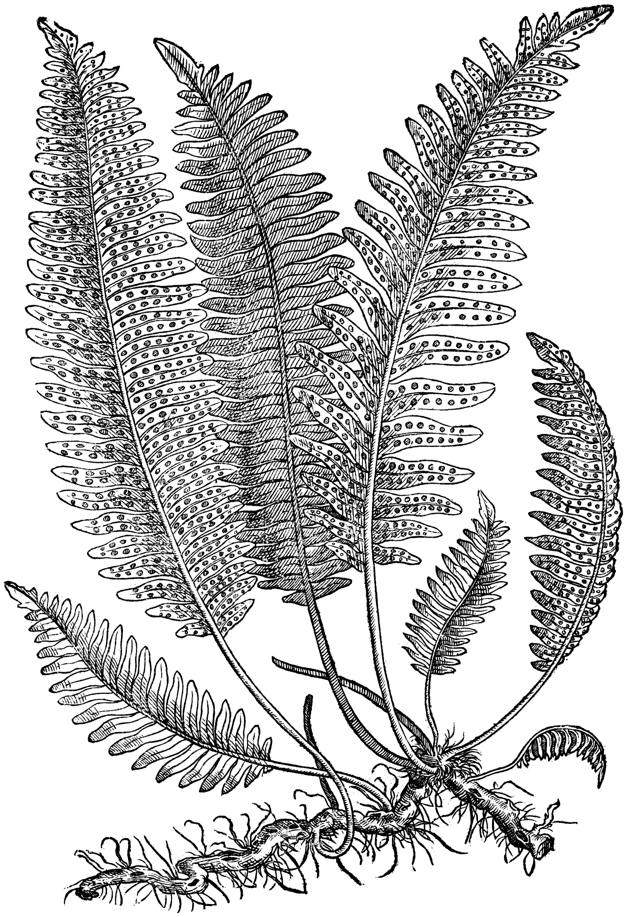
Digitalis mertonensis **Strawberry Foxglove** Copper-tinged strawberry-rose 2$^{1}/_{2}$" pendulous bell-shaped flowers adorned with pink and white spotted throats. Basal rosette of big velvety leaves. Flowers June through August. Good for cutting or border. Moist slightly acid soil in full sun to partial shade. All parts of the plant are poisonous, so wash after handling it. On the bright side, deer and rabbits avoid it! Large true-breeding tetraploid hybrid benefits from dividing every 3 years. 3–4' spires. Plant 24–36" apart. Z3.

7941: *1 for $4.75*
7942: *3 for $12.50*
7943: *6 for $22.50*

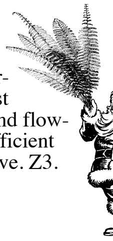
Eryngium alpinum **'Blue Star' Sea Holly** is derived from a species native to the Alps and Balkan mountains. It features egg-shaped metallic-blue flowers rising from star-shaped silvery feathered bracts on bluish-green stems and foliage. It is highly ornamental and quite a unique addition to the landscape in both color and form. Fits well into the sunny border and attracts butterflies. Try planting with Rudbeckia and Liatris. Excellent for cutting fresh and for dried arrangements. 28–30" tall. Z3.

7951: *1 for $4.00*
7952: *3 for $10.50*
7953: *6 for $18.50*





Ferns are flowerless spore-producing perennials represented by over 10,000 species worldwide, ranging from 70' tropical tree ferns to teeny plants sprouting from cracks in alpine rock. In Maine we enjoy lush fern displays all summer on the roadsides and in the woods. More and more people are using ferns as foundation plantings and in all kinds of shaded spots. Ferns make wonderful low-maintenance foliage plants that thrive in moist woodsy humus-rich soil and lend a serene aura to a shady garden or landscape. Mulch if necessary to keep crowns from drying out.



Christmas Fern *Polystichum acrostichoides* remains evergreen in warmer zones, where it's widely used for Christmas cut greenery. Shuttlecock of fronds with ladder-like parallel leathery dark green leaves is partially evergreen in our climate. Provides good fall interest and emerges in very early spring to complement woodland flowers. Moist acidic soil, light shade, tolerates sun given sufficient moisture. Plant 2–3' apart. 18–24" tall. Northeastern native. Z3.

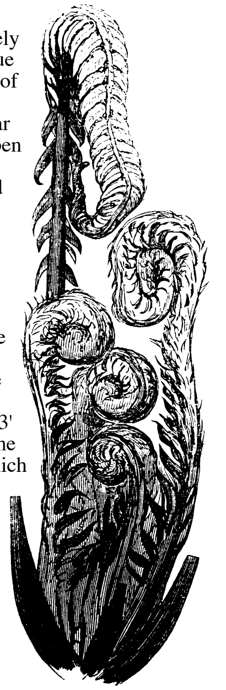
8011*: 1 for $4.00*
8012*: 3 for $10.50*
8013*: 6 for $19.25*

Lady Fern *Athyrium filix-femina* Graceful bright green fronds are twice compound with very numerous leaflets resulting in a fine-textured classic fern appearance. Many variant forms, a few taller than 4' but most are under 2'. Works as a foundation planting on the shady sides of my house. Spreads easily from falling spores in moist soil. Tolerates more sun and drier soil than most ferns. Native to most of the Northern Hemisphere. Z3.

8021*: 1 for $4.00*
8022*: 3 for $10.75*
8023*: 6 for $19.25*

Maidenhair Fern *Adiantum pedatum* Delicate whorled form makes it one of my favorites. Glossy black stems curve up and then droop toward the ground with more narrow black stems growing in arches from them. Tiny distinct ginkgo-like green leaves line every stem. Plant 12" apart. Likes semi-shade or shade, moist soils. 10–12" tall. Native to eastern North America. Very hardy. Z2. **UpS "To-Watch" list.**

8031*: 1 for $4.00*
8032*: 3 for $10.75*
8033*: 6 for $19.25*

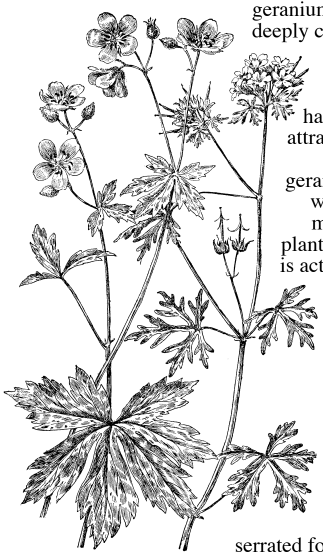


Ostrich Fern *Matteuccia struthiopteris* A delicately textured bright green deciduous fern with a golden hue in the light. Frond tips curl like ostrich feathers. One of the largest hardy ferns, 3–7' tall, and spreads by underground runners, so give it room. Always popular and our best-selling fern for the last 5 years. Likes open shade, woods and wet banks. Tolerates full sun in swampy areas. Native to Europe, but well established and welcome in North America. Z2.

8041*: 1 for $4.75*
8042*: 3 for $12.25*
8043*: 6 for $22.00*

Royal Fern *Osmunda regalis* One of the showiest garden ferns, makes a great focal point on a waterside or in a woodland. Attains giant proportions. Slow-growing plant gets to be 6' tall and over 9' wide in humus-rich moist-to-wet soil. Soft and wavy deciduous lance-shaped light green fronds can reach 3' long. Sometimes called **Flowering Fern** because some of the fronds have brown spore cases on their tips which lend a decorative tassel-like appearance. Evolutionarily speaking, *Osmunda* is one of the oldest plant genera, native to North and South America and Asia. Some royal fern individuals are said to be 1000 years old. Ours are much younger. Z3.

8051*: 1 for $4.50*
8052*: 3 for $11.50*
8053*: 6 for $20.75*



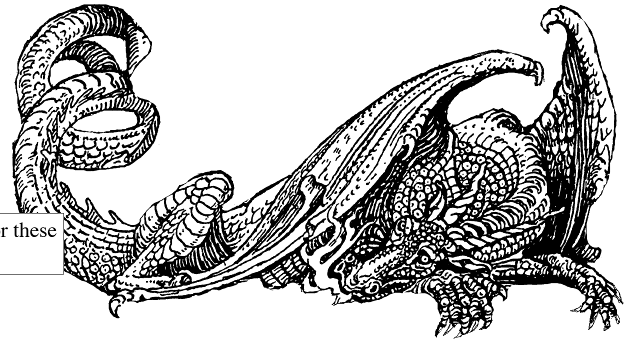
Geranium pratense **'Orion' Cranesbill** Clusters of single 1" wide sapphire-blue flowers with violet veins. Larger-flowered than most geraniums and forms a slightly smaller mound. The deeply cut leaves turn vivid shades of red-orange in autumn and distinctive long narrow "cranesbill" seedpods flutter jauntily above the spreading foliage. Vigor, longevity, hardiness, lo-o-ong flowering period and lush attractive foliage make them useful for borders, edging or rock gardens. This is the true geranium. Name confusion may be a big reason why this attractive easy-to-grow genus is not more popular: the tender bedding and indoor plant with big red flowers often called geranium is actually *Pelargonium.* Tolerates partial shade, but flowers more in full sun. Plant 12–18" apart in average garden soil. 20–24" tall. Z4.

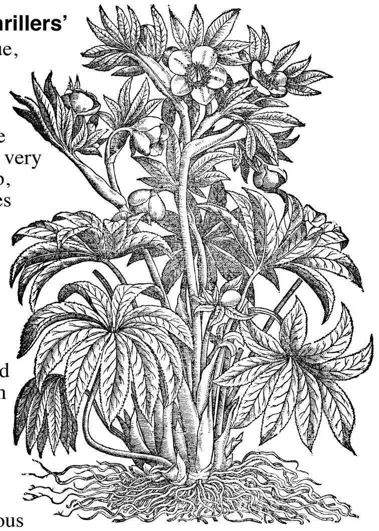
8061*: 1 for $4.50*
8062*: 3 for $12.00*
8063*: 6 for $22.00*

Geum chiloense **'Red Dragon' Avens** This selection of the old-fashioned geum is becoming popular as the perfect early red for the border. Flowers appear on thin 20" stalks atop mounded rosettes of serrated foliage, nodding daintily at first, then turning upward to show their double intense scarlet blooms with golden stamens. Plant en masse, three plants or more, for a bold enchanting effect. I can't pass by 'Red Dragon' in my garden without being beckoned to stare. Blooms for nearly a month and possibly longer with regular deadheading. Plant about a foot apart in moist but not boggy soils. 18" tall and just as wide. Z4.

8071*: 1 for $3.50*
8072*: 3 for $9.00*
8073*: 6 for $15.00*

Planting instructions for these perennial plants on page 53.





***Helleborus orientalis* 'Winter Thrillers'**

Lenten Rose Mysterious and unique, Hellebore was named by the ancient Greeks and is native to the chalky soils of Macedonia, Asia Minor and the Caucasus. Evergreen in all but the coldest climates; blooms in winter or very early spring. Looks like a small shrub, 15–18" tall, with leathery green leaves palmately divided into many lobed leaflets. Saucer-shaped flowers, 2–3" across, appear in very early spring, last up to eight weeks, and vary in color; this large-flowered mix includes red, pink, apricot, purple, green and yellow, with many heavily spotted flowers as well. Likes dappled shade and neutral to alkaline soil with plenty of organic matter and good drainage, but *H. orientalis* is the easiest of the genus to grow and tolerates a wide range of conditions. Does not like to be disturbed and is dormant in summer. Plants are vigorous growers and can form clumps up to 3' across. Try a few planted together for an array of colors. *Caution: all parts of the plant are poisonous*. Z4.

***8081**: 1 for $9.00*
***8082**: 2 for $16.50*
***8083**: 3 for $22.00*

***Hemerocallis* Daylily** Champion low-maintenance perennial produces a bush of narrow arched leaves topped with lily-shaped flowers from July to September. *Hemerocallis* means *beautiful day*, referring to the fact that each flower lasts only a day, but since each scape (or stem) is covered with buds, bloom periods can be extensive and the long stems work well in bouquets. Very hardy, flourishes under a wide range of conditions, from full sun to shade, wet to dry. Trouble-free, chokes out weeds. For foundation planting, terrace, brookside, border or wild garden. Plant 12–18" apart in average soil; benefits from a shovel or two full of compost.

Once again we are delighted to list varieties from Lew Purinton, Somerville, ME, gardener and daylily collector *extraordinaire*. All our daylilies are **ME Grown**! Supplies may be limited; order early. Z2.

***H.* 'Daniel Mann'** Garnet-red petals with a lighter midrib and bright yellow throat. Hybridized by the late Ron Valente of North Berwick. 27" tall. **ME Grown.**

***8091**: 1 for $4.25*
***8092**: 3 for $11.25*
***8093**: 6 for $20.00*

***H.* 'Mata Hari'** Aptly named for the famous exotic femme fatale, this daylily is irresistibly alluring. Slightly ruffled salmon petals with an ivory mid-rib, deep raspberry eye and a yellow throat. 3' tall. **ME Grown.**

***8101**: 1 for $4.50*
***8102**: 3 for $11.50*
***8103**: 6 for $20.50*

***H.* 'Ming Porcelain'** Pastel ivory pink with a touch of peach, gold-edged petals and a yellow throat. The unique matte tones give the look of fine painted porcelain. 28" tall. **ME Grown.**

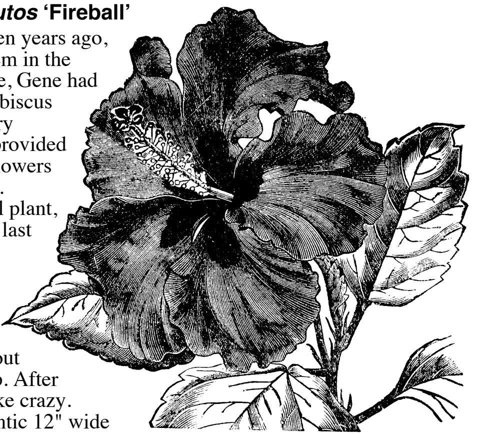
***8111**: 1 for $4.25*
***8112**: 3 for $11.25*
***8113**: 6 for $20.00*

***H.* 'Ruffled Apricot'** Put a bright splash of color in the garden with these huge 7" apricot-peach lightly ruffled flowers. 28" tall. **ME Grown.**

***8121**: 1 for $4.50*
***8122**: 3 for $11.50*
***8123**: 6 for $20.50*

***H.* 'Strutter's Ball'** An incredible deep purple with bright yellow throat and purple stamens. 28" tall. **ME Grown.**

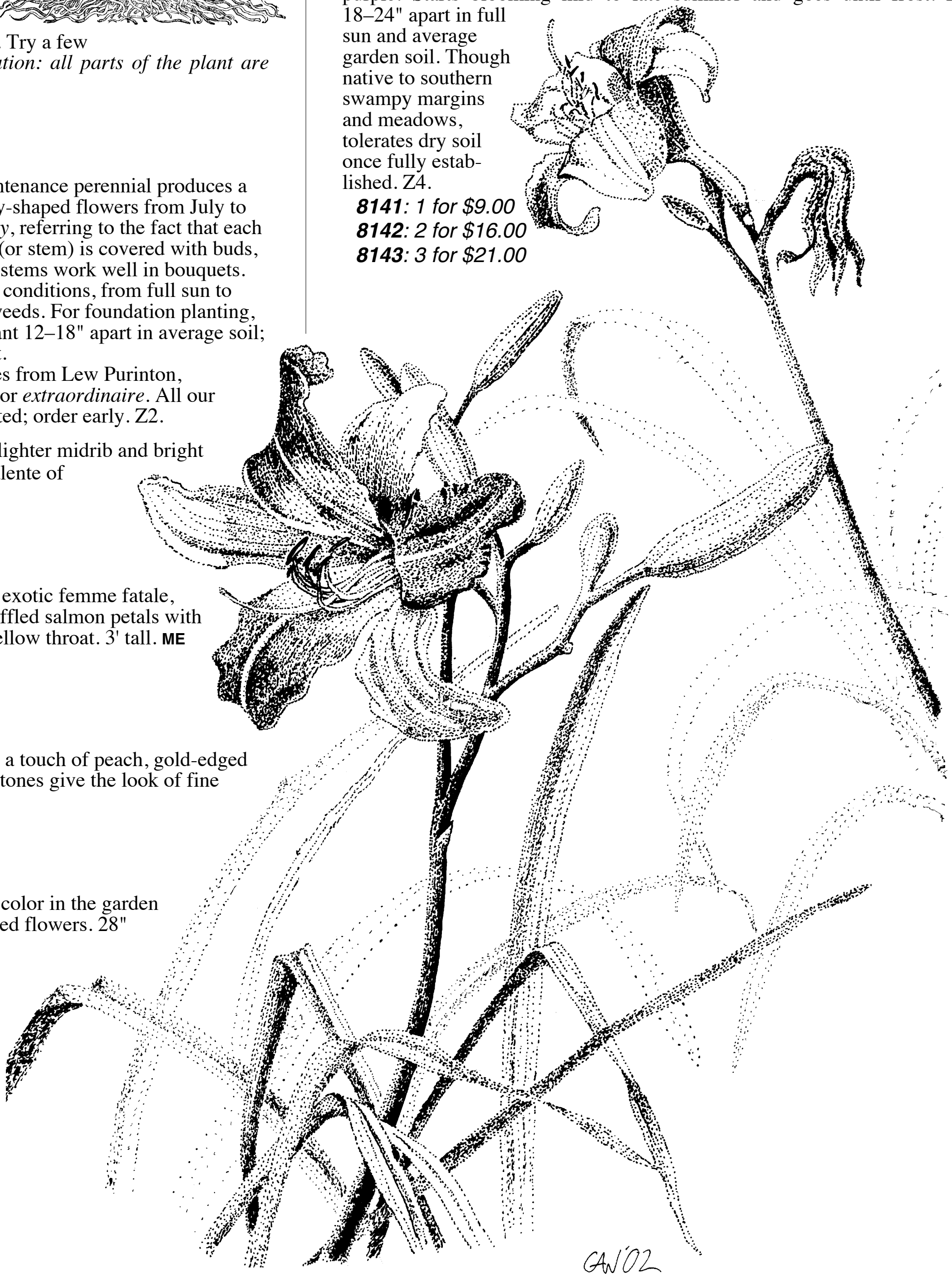
***8131**: 1 for $4.25*
***8132**: 3 for $11.25*
***8133**: 6 for $20.00*

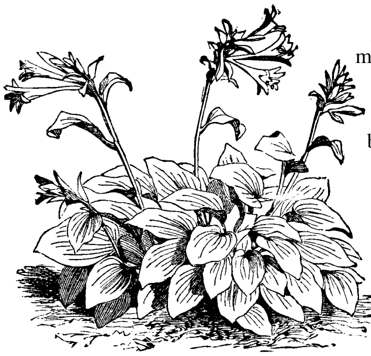


***Hibiscus moscheutos* 'Fireball'**

Rose Mallow Sixteen years ago, before it was a hot item in the northern nursery trade, Gene had the foresight to list hibiscus and planted one. Every summer since it has provided tropical foliage and flowers here in central Maine. Glorious vigorous tall plant, hibiscus is one of the last to appear in spring, making it a good companion for spring bulbs. Since it emerges so late, be careful not to root it out during spring cleanup. After emerging, it grows like crazy. 'Fireball' sports gigantic 12" wide flaming red flowers with overlapping petals. Strong shrub-like habit with deeply lobed green leaves with a flush of purple. Starts blooming mid to late summer and goes until frost. Plant 18–24" apart in full sun and average garden soil. Though native to southern swampy margins and meadows, tolerates dry soil once fully established. Z4.

***8141**: 1 for $9.00*
***8142**: 2 for $16.00*
***8143**: 3 for $21.00*



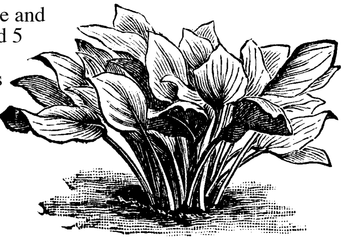


Hosta has bold foliage in orderly mounds with dependable sprays of fragrant bell-shaped flowers on tall stalks. Valuable and cherished low-maintenance border plant provides shade-loving ground cover spring to frost. Formerly called **Plantain Lily** or **Funkia** but I have never heard either used. A friend described them as "so architectural!" With their varying colors, textures and clump sizes, hostas alone under trees can make a woodland garden. Hostas tolerate a wide range of soil conditions, but need moisture. Those with blue and variegated leaves develop best color in shade. Deep shade gives fewer flowers. I am surprised at how few people trim the spent flower stalks from their hosta clumps. A quick clipping of all the old stalks restores the clump's tidy attractiveness until frost. Plant 2–4' apart in rich soil with adequate humus. Divide every 4–5 years, or disturb clumps as little as possible; they improve with age as they spread and establish. Z3.

***H.* 'Antioch'** The dark green leaves come to a long tapered point and are edged with a narrow yellow margin that fades to cream, then white, with maturity. Holds its color longer than most hostas and is robust enough to spread to almost a yard wide. 24" tall, scapes to 35".

***8151**: 1 for $4.00*
***8152**: 3 for $9.00*
***8153**: 6 for $15.00*

***H.* 'Blue Angel'** Voted American Hosta Society's Best Blue Hosta in 2000. Gigantic heart-shaped blue-green seersuckered leaves grow to more than a foot wide and half as long. A big plant, will exceed 5 feet across at maturity. Truly eye catching! Doesn't care for sun but is considered slug resistant. Perfect for a damp shady location. Lavender flowers. 44" tall, 48" scapes.



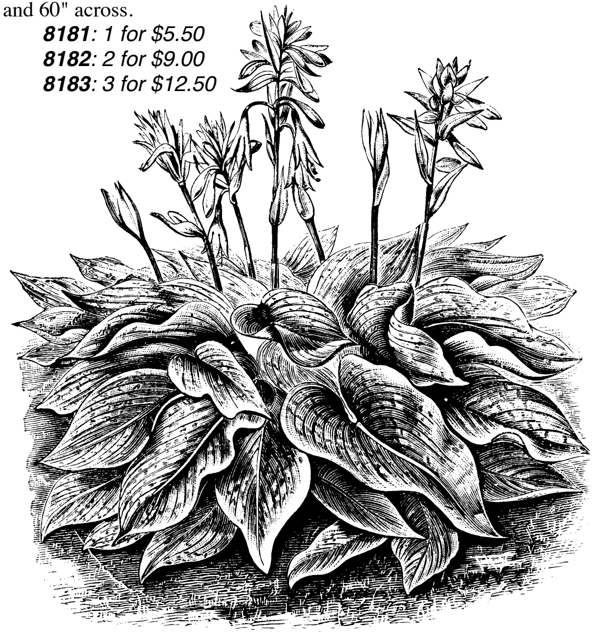
***8161**: 1 for $5.50*
***8162**: 2 for $9.00*
***8163**: 3 for $12.50*

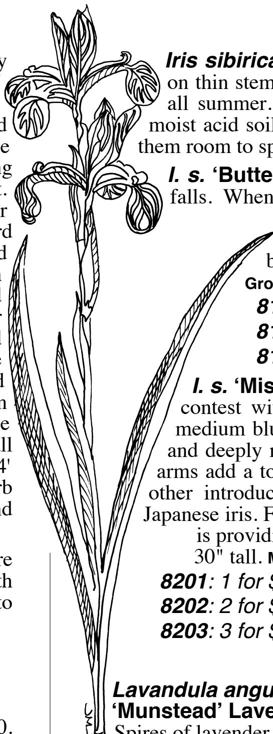
***H.* 'Guacamole'** Sport of 'Fragrant Bouquet' won a Hosta of the Year award in 2002. Pale lavender flowers are large and fragrant, but the leaves are the main attraction. Very substantial and large with irregular dark green edging and deep veins; centers are the yellow-green of avocado slices. Colors intensify in light and with age. Rapid grower with good sun tolerance. Clumps are 22–24" tall, scapes to 36".

***8171**: 1 for $4.00*
***8172**: 3 for $10.00*
***8173**: 6 for $17.00*

***H.* 'Sum and Substance'** Huge rounded chartreuse-green very thick seersuckered leaves become quite golden in sunlight. Popular award winner has pale lilac flowers on leaning scapes. Clumps become very large: to 36" tall and 60" across.

***8181**: 1 for $5.50*
***8182**: 2 for $9.00*
***8183**: 3 for $12.50*





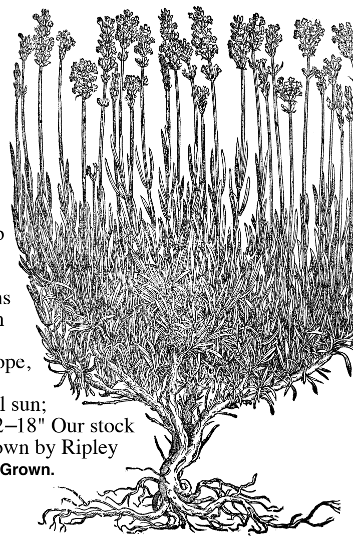
***Iris sibirica* Siberian Iris** produces delicate flowers in late June on thin stems excellent for cutting. Tall slender foliage looks good all summer. Tolerates most conditions, but performs best in rich moist acid soil. Plant 12–15" apart in full sun or partial shade. Give them room to spread, and divide clumps every few years. Z3.

***I. s.* 'Butter and Sugar'** has white standards with butter-yellow falls. When renowned Maine iris breeder Dr. Currier McEwen introduced Butter and Sugar in 1970 it was the world's first yellow Siberian iris. Still a marvelously bright addition to the border or waterside. 28" tall. **ME Grown.**

***8191**: 1 for $4.50*
***8192**: 3 for $11.50*
***8193**: 6 for $19.00*

***I. s.* 'Miss Portland'** A huge winner in the Siberian iris beauty contest with charm, class and a blue to die for. Standards are medium blue with slightly darker veins. Crisp blue falls are wide and deeply ruffled with a white signal and fine white edges. Style arms add a touch of aqua. Bred by Dunlop and Cole and, like their other introductions, has a wide flaring blossom that resembles a Japanese iris. Fieldstone Gardens in Vassalboro lists it exclusively but is providing us with the stock. Mid through late season bloomer. 30" tall. **ME Grown.**

***8201**: 1 for $7.00*
***8202**: 2 for $12.50*
***8203**: 3 for $17.00*

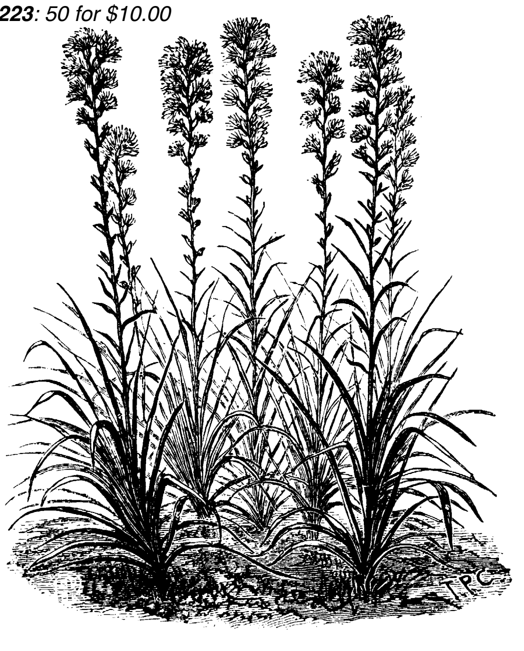


***Lavandula angustifolia* 'Munstead' Lavender** Spires of lavender-blue 15–18" tall flowers treasured for their scent. Valued for dried arrangements, potpourri and herb bundles, lavender's aroma soothes the nervous system and perfumes the linen closet. Blooms all summer. Aromatic grey-green lanceolate foliage, bushy habit. Makes a nice border, rockery, slope, edging or specimen plant. Prune woody stems in spring. Likes full sun; demands good drainage. Plant 12–18" Our stock is MOFGA-certified organic, grown by Ripley Farm in Dover-Foxcroft. Z4. **ME Grown.**

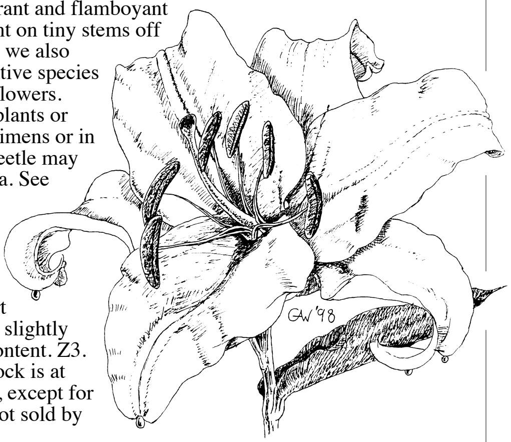
***8211**: 1 for $6.50*
***8212**: 2 for $12.50*
***8213**: 3 for $16.75*

***Liatris spicata* Blazing Star** or **Gayfeather** grows stiff dense "bottlebrush" magenta-purple flower spikes, from July to September, which open from the top down. Flowers are good for cutting; leave $^{1}/_{3}$ of stem on plant. The foliage is fine and grass-like. Hardy, tolerates a broad range of growing conditions, but not drought. 20–30" tall. Plant 3" deep, 8–12" apart, in well-drained fertile soil. Z3.

***8221**: 10 for $2.75*
***8222**: 20 for $4.75*
***8223**: 50 for $10.00*



***Lilium* Lilies** Queen of the perennial border, fabulously showy and surprisingly easy to grow. Breeders have been working on them for thousands of years and continue to develop scores of new cultivars every year. It's confusing terrain, but briefly: **Asiatic** types bloom early, are a bit smaller (under 4') than Orientals and often have their star-shaped blossoms facing upward. **Oriental** strains tend to be tall (may need staking) and bloom late, with their very fragrant and flamboyant blossoms slightly pendant on tiny stems off the main stem. This year we also listing *L. superbum*, a native species with orange "turkscap" flowers.



Excellent as bedding plants or cutflowers, good as specimens or in solid masses. Lily leaf beetle may be a problem in your area. See sidebar for some details. Light shade prolongs summer blooms and keeps the bulbs cool. Mulch in full sun. Plant bulbs 6–8" deep, 6" apart in rich well-drained soil, slightly acid with good humus content. Z3.

All this year's bulb stock is at least $1\frac{3}{4}$–2" in diameter, except for the Turkscap, which is not sold by size.

***L.* 'Acapulco'** Oriental, 36-48" Fragrant. Deep pink with a hint of orange emerging from the throat. Pink dots and subtle pink stripe highlight the warm color.

8231: *1 for $2.75*
8232: *3 for $6.00*
8233: *6 for $10.00*

***L.* 'Black Out'** Asiatic, 44–48" Rich glossy burgundy-red with even darker spotting on the throat. Few lilies have such a dark, smoldering color. Bargain prices.

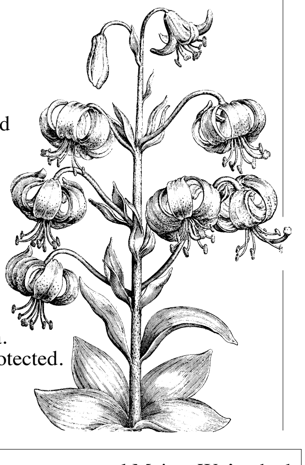
8241: *2 for $3.50*
8242: *6 for $10.00*
8243: *12 for $18.00*

***L.* 'Casa Blanca'** Oriental, 40–44" (but I've seen them blooming from 3–8'). Pure white with textured white specks, and bobbing russet anthers. Absolutely gorgeous and their alluring fragrance fills the garden. Always one of our most popular offerings. Bargain prices.

8251: *2 for $3.50*
8252: *6 for $9.50*
8253: *12 for $17.50*

***L.* 'Stargazer'** Oriental, 24–30" Deep rose spotted with darker rose and narrowly edged with white. Fragrant flowers are huge when plants become well established. Continues to be wildly and deservedly popular. Bargain prices!

8261: *2 for $3.50*
8262: *6 for $9.50*
8263: *12 for $16.00*

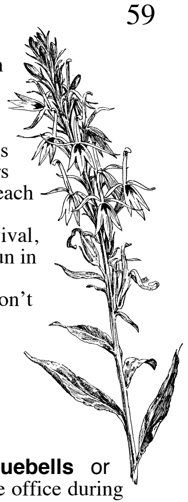


***L. superbum* Turkscap Lily** Native woodland plant which is often mistaken for the Asian tiger lily. The maroon-spotted orange petals curve backward to touch the stem as the flower hangs facing downward, almost as if it's inside-out. The turkscap foliage is in unmistakable whorls every few inches along the otherwise bare stem and its flowers are somehow more wonderful than the tiger lily's. Prefers wet meadows and the edges of moist woods, so plant in moist dappled shade, or partial to full sun in a wet area. Flowers July–Sept. 3–7' tall. Z5, maybe Z4 if protected.

8271: *1 for $4.00*
8272: *3 for $10.00*
8273: *6 for $18.00*

Lily leaf beetle (*Lilioceris lilii*) has made its way to central Maine. We've had good results picking the first flush of adults and dropping them in soapy water; we've seen very few larvae. Some leaves had holes in them but the damage was nothing like the denuded stalks that some gardeners described. Standard organic insecticides are also effective.

Small attractive bright red beetles, the adults, overwinter in soil and plant debris and emerge in early spring to munch, mate and lay tiny dull-orange eggs in irregular rows on the undersides of leaves. Larvae hatch in about a week and feed for 16–24 days on leaves of lilies (not daylilies), fritillaria, and nightshades. The larvae are the real nuisance: voracious eaters, they carry their excrement on their backs to deter predators which makes them mighty unappealing. They then drop to the ground where they pupate in cocoons. In about 25 days they emerge as adults.



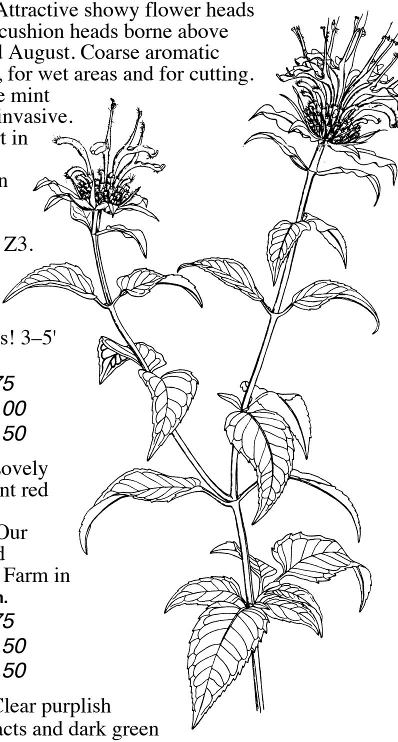
***Lobelia cardinalis* Cardinal Flower** A wildflower in all but the far northwestern states. Unfortunately habitat loss and thoughtless picking can spell disaster for this beautiful plant in the wild. The striking red flowers remind me of the plumage of an exotic bird. Dense spikes grow up to 4' tall. The intense long tubular scarlet flowers are irresistible to hummingbirds and butterflies because each tube has a pool of nectar at its base. Cardinal flower is a short-lived perennial which depends on its seeds for survival, so allow it to reseed. Best planted in light shade to full sun in moist to wet soil. Needs plenty of organic matter and moisture. Can be fussy about location so plan well and don't intend to move. Our stock is MOFGA-certified organic, grown by the conscientious folks at Ripley Farm in Dover-Foxcroft. Z4. **ME Grown. UpS "To-Watch" list.**

8281: *1 for $5.75*
8282: *2 for $11.00*
8283: *3 for $15.00*

***Mertensia virginica* Bluebells** or **Virginia Bluebells** or **Virginia Cowslip** When Kip brought bluebells into the office during the daffodil bloom one year, I remembered what a spring treat they are. Clump-forming plant with erect stems and oval veined leaves bears clusters of nodding bell-shaped flowers on terminal cymes. Pink buds open to sky-blue or purple-blue flowers which look a lot like those of borage or Pulmonaria. In fact, another name is *M. pulmonarioides*. Beautiful in shade displays with ferns, with Dicentra, with daffodils or Scilla. Prefer moist lowlands and acid woodsy soil in part shade. 18–24" tall. Dormant in summer. Nursery propagated, native to eastern North America. Z3.

8291: *1 for $3.50*
8292: *3 for $8.75*
8293: *6 for $15.00*

***Monarda didyma* Bee Balm** or **Oswego Tea** is loved by bees, butterflies and hummingbirds. Attractive showy flower heads with tubular petals on pincushion heads borne above colorful bracts in July and August. Coarse aromatic foliage. Good for borders, for wet areas and for cutting. A vigorous member of the mint family—some might say invasive. Plant crowns 16–20" apart in light shade in moist soil. Thrives in full sun if given adequate moisture or mulched with leaf mold; tolerates most conditions. Z3.



***M.* 'Coral Reef"** Bright coral-pink! In my garden its color has exceeded my expectations. Fabulous! 3–5' tall. Stock is 3" plugs.

8301: *1 for $5.75*
8302: *3 for $15.00*
8303: *6 for $25.50*

***M.* 'Panorama Reds'** Lovely blooms in shades of vibrant red attract butterflies and hummingbirds. 3–4' tall. Our stock is MOFGA-certified organic, grown by Ripley Farm in Dover-Foxcroft. **ME Grown.**

8311: *1 for $5.75*
8312: *3 for $15.50*
8313: *6 for $28.50*

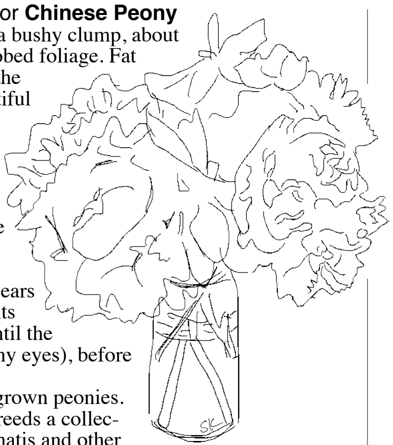
***M.* 'Raspberry Wine'** Clear purplish wine-colored flowers. Bracts and dark green foliage have purple-tinged shading. 3–4' tall.

8321: *1 for $5.50*
8322: *3 for $14.25*
8323: *6 for $25.50*

***Nepeta faasenii* Catmint 'Walker's Low'** Another lovable member of the mint family. Grey-green aromatic foliage on long arching stems topped by lavender-blue flowers that provide a good show of color nearly all summer. Excellent for the border or as a tall edging. Flowers attract bees, butterflies, hummingbirds and human admiration. 2007 Perennial Plant of the Year. Cut way back in midsummer to encourage more bloom. Likes hot and dry, but will grow in any well-drained soil, full sun to part shade. 2–3' tall despite its name. Z3.

8331: *1 for $3.75*
8332: *3 for $9.75*
8333: *6 for $17.50*

Pæonia lactiflora Garden Peony or **Chinese Peony** Red shoots appear in spring and form a bushy clump, about 3' x 3', of lustrous dark green deeply lobed foliage. Fat spherical buds on sturdy stems above the foliage gradually open into large beautiful flowers from late spring to early summer. (Ants may help the buds to open so don't discourage their presence.) Huge flowers are stunning on the bush and wonderful when cut. If you catch flower buds when they are just marshmallow soft, they can be cut and stored for weeks in the fridge for bouquets later. May take up to 3 to 5 years to establish before blooming and resents being disturbed. Wait several years, until the plants have many stems (therefore many eyes), before attempting to divide. Z3.



Again we are excited to list Maine-grown peonies. Eleesha Tonken, who maintains and breeds a collection of spectacular peonies, roses, clematis and other perennials at Harvest Hill Farm in Waldoboro, is supplying us with her stock. It's such a treat to visit Harvest Hill and see so many extraordinary peony varieties, with blooms bigger and more beautiful than the peonies we usually see. This year we selected two standouts from her collection.

_P. l._ 'Festiva Maxima' Introduced in 1851. Large fragrant double white flowers have tiny crimson lines and flecks appearing randomly through some of the inner petals. Early season. 36–39" tall. 2–3 eyes.

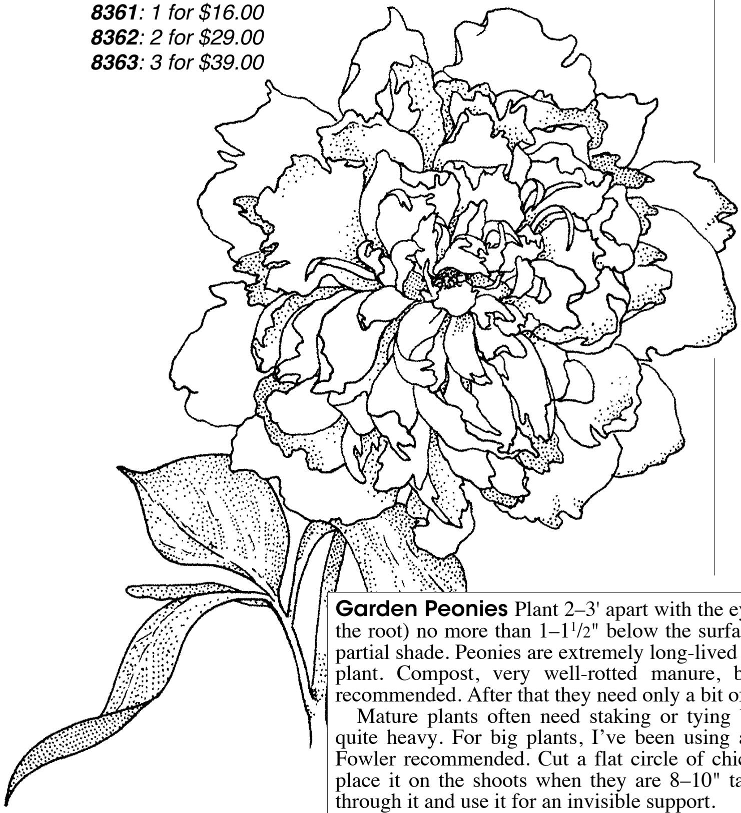
8341: *1 for $11.00*
8342: *2 for $17.00*
8343: *3 for $23.00*

_P. l._ 'Golly' makes you say "Wow!" A double layer of dreamy pastel pink outer petals frame an irregular ring of creamy-golden petaloids (little petals) surrounding the poof of light pink center petals. Please check the photo on our website: we can't describe how attractively these soft colors and varying petal sizes mingle in this loosely doubled bloom. Midseason. Large hardy stock, at least 5 eyes. 34" tall. **ME Grown.**

8351: *1 for $16.00*
8352: *2 for $29.00*
8353: *3 for $39.00*

_P. l._ 'Magenta Moon' Large fully double intense magenta flowers are sure to please. Classy gorgeous deep dark color. Large hardy stock, at least 5 eyes. Around 30" tall. **ME Grown.**

8361: *1 for $16.00*
8362: *2 for $29.00*
8363: *3 for $39.00*



Garden Peonies Plant 2–3' apart with the eyes (where the growth shoots meet the root) no more than 1–1½" below the surface in well-drained soil, full sun to partial shade. Peonies are extremely long-lived so amend the soil richly when you plant. Compost, very well-rotted manure, bone meal and azomite are all recommended. After that they need only a bit of weeding and feeding to flourish.

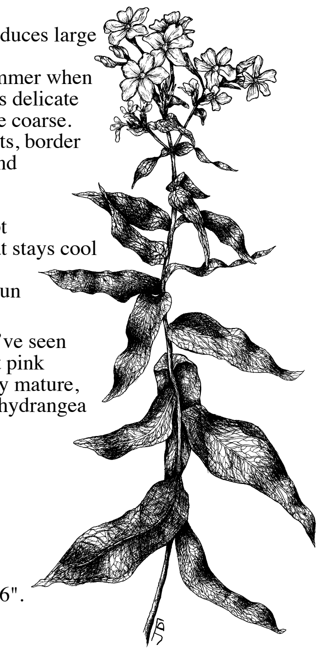
Mature plants often need staking or tying because flowers and buds can be quite heavy. For big plants, I've been using a chicken-wire method that Mary Fowler recommended. Cut a flat circle of chicken wire 2 or 3' in diameter and place it on the shoots when they are 8–10" tall. The shoots lift the wire, grow through it and use it for an invisible support.

Remove spent flowers after blooming, then cut dead foliage to near ground level in fall. Plant along the driveway; a heavy snowbank doesn't bother them.

Perovskia atriplicifolia Russian Sage blooms in midsummer with slender airy spires of lavender-blue tubular flowers. Finely divided grey leaves are aromatic when crushed. 1995 PPA Plant of the Year. Low-maintenance background or filler, beautiful with roses or whites and blues. Perovskia has one of the longest bloom times of any blue-flowered plant. Upright habit, semi-woody shrub. Emerges slowly in spring; cut back after frost. Tolerates drought, loves heat and full sun, can't bear standing water. 3–4' tall. Likes to spread out once it gets established; plant 24–36" apart. I suspect that Zone 4 reports of winterkill are from poor drainage rather than cold, so a cautious Z4.

8371: *1 for $4.50*
8372: *3 for $11.00*
8373: *6 for $19.50*

Phlox paniculata Garden Phlox produces large spreading clusters of fragrant showy long-blooming flowers in mid to late summer when so many blooms are fading, and produces delicate satiny panicles when so many blooms are coarse. Wonderful color and fragrance for accents, border or naturalized area. Attracts butterflies and hummingbirds. Essential component of late-summer wedding bouquets. Extend flowering season by watering and prompt deadheading. Prefers humus-rich soil that stays cool and moist in summer and benefits from regular sidedressing. Plant 2' apart, full sun to partial shade. Z3.



_P._ 'Sherbet Cocktail' Like no phlox I've seen before! Buds are yellow and open as soft pink blooms edged with yellow-green. As they mature, edging turns a lighter green, resembling hydrangea blossoms. 30" tall.

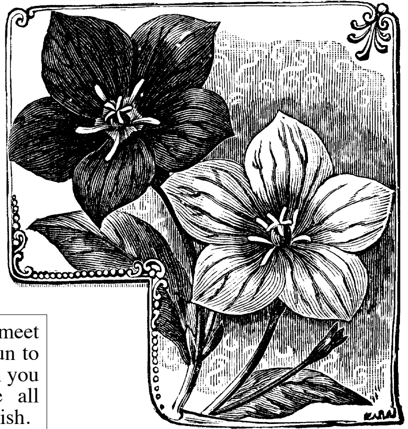
8381: *1 for $4.00*
8382: *3 for $10.75*
8383: *6 for $19.50*

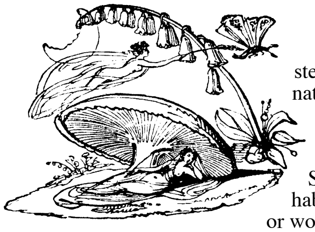
_P._ 'Starfire' Reliable old favorite often considered the best red. Large (6x6") abundant cherry-red flower clusters are fragrant from midsummer into fall. 25–36".

8391: *1 for $3.75*
8392: *3 for $9.00*
8393: *6 for $16.00*

Platycodon grandiflorus Balloon Flower Root is *Jie geng* in China. Named for its buds which really do swell like balloons before they burst into splendid bell-like single blue flowers. Clump-forming plant has dark green oval-to-narrow leaves that look good in most settings. Fascinating balloons appear on upright stems above the foliage in mid to late summer and are good for cutting. Sometimes self-sows, likes moist well-drained soil. As well as being of excellent ornamental value, it is also a widely used Chinese medicinal plant. The roots have astringent and expectorant properties making it a common remedy for cough, sore throats, lung and skin conditions. Roots of plants 2– 3 years old are harvested in the spring or autumn, peeled and used fresh or dried. Correct dosage is important so consult your local herbalist if you intend to use as an herbal remedy. Grows well in full-sun to partial shade and does best in cool, moist conditions. Emerges slowly in spring. 15–40" tall. Sustainably grown by Lauren Cormier. Z3. **ME Grown.**

8401: *1 for $5.50*
8402: *3 for $15.00*
8403: *6 for $26.00*





***Polygonatum biflorum* Solomon's Seal** forms clumps of graceful arching stems about 3' long with long narrow alternate leaves. Greenish-white bell-shaped tubular flowers dangle from the stems in a row in late spring, and become small round blue-black fruits in early fall. Shade and moisture-loving, with a serene habit, Solomon's Seal is ideal for the shade or woodland garden and makes a good foil for ferns. Sends up a few more stems every year; sturdy and long-lived. Native Americans used the root tea for ailments of stomach and lung and for general debility, and used washes from the root for all kinds of external injuries. Western herbalists use the root as a connective tissue anti-inflammatory and to strengthen weak joints and ligaments. Don't confuse it with False Solomon's Seal which has a plume-like flower at the *end* of the stem. As herbalist Jim McDonald points out: in the wood, "there's always more False Solomon's Seal than True, and this makes its ecological status an important consideration, especially when harvesting." Therefore, it's best to grow your own patch for making herbal remedies. Z3.

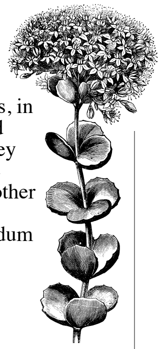
***8411**: 1 for $3.75*
***8412**: 3 for $9.75*
***8413**: 6 for $17.00*

***Pulmonaria saccharata* 'Mrs. Moon' Lungwort** Bold-textured woodland perennial contrasts well with other early season plants such as hellebore and ferns, getting the garden off to a great start. Ovate green leaves marked with silver-white splotches. Magenta-pink buds open to bright blue flowers, creating a striking effect with both colors appearing at once on the same plant. Needs a shady spot. Plant 1–2' apart, will spread but won't take over. 10–12" tall with a spread up to 2'. Our stock is 3" plugs. Z3.

***8421**: 1 for $4.75*
***8422**: 2 for $8.50*
***8423**: 3 for $11.50*

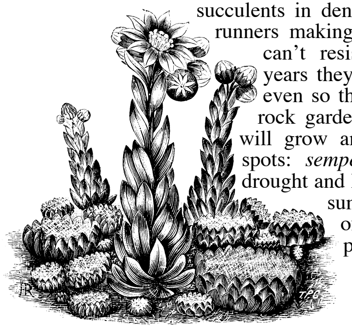
***Rudbeckia nitida* 'Herbstonne' Green-eyed Coneflower** Also called '**Autumn Sun**'. Much like its sister plant Black-eyed Susan but with a slightly larger, more prominent green-yellow cone-shaped "eye." Golden petals point downward. Very large plant grows to 5' or taller, with a 3–4' spread. Perfect for the cottage garden or wildflower patch. I've admired them recently both in wedding bouquets and in a stunning patch outside of my favorite Bar Harbor cafe. Easy to grow in average well-drained soil and full sun. Z3.

***8431**: 1 for $4.00*
***8432**: 3 for $10.00*
***8433**: 6 for $17.00*



***Sedum* 'Razzleberry'** We love sedums because they require little maintenance and provide interesting textures and other-worldly flowers. Their performance in hot dry places where nothing else thrives doubles their value. Excellent as dried flowers, in a vase or for brightening the garden. 'Razzleberry' has all this and more! Giant 9" brilliant raspberry flower heads on smoky blue-grey foliage. A lovely low-growing and sprawling plant that fills in the border or rock garden spectacularly. Earlier blooming than most other Sedums and holds its color well into the fall much like its taller cousin 'Autumn Beauty'. Disease resistant and not affected by sedum leaf scorch. 7" tall. Our stock is 3" plugs. Z3.

***8441**: 1 for $4.00*
***8442**: 3 for $10.25*
***8443**: 6 for $18.50*



***Sempervivum* Hen and Chicks** or **Houseleek** Piled clusters of little succulents in dense rosettes propagate by sending out runners making teeny duplicates of themselves. We can't resist them—they're really cute. Some years they send up crazy fat flower spikes, but even so they are less than 9" tall. Great for the rock garden or peeking out of a rock wall, but will grow anywhere you let them except soggy spots: *sempervivum* means *always alive*. Very drought and heat tolerant. Good for containers on a sun-drenched patio. We're offering a mix of varieties including reds, greens, purples and 'Cobweb', all in plugs. Z3.

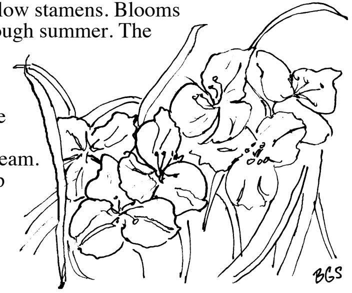
***8451**: 1 for $3.50*
***8452**: 3 for $8.50*
***8453**: 6 for $15.00*

***Tanacetum coccineum* 'Robinson's Red' Painted Daisy** Also called **Pyrethrum**. Similar to its sister plant, the white wild daisy, but its large flowers have been "painted" a rich red that contrasts well with bright yellow centers. It's a great cutflower with elegant frond-type foliage that shows off the brilliant blooms in July. If cut back after flowering, it will often rebloom later in summer. Plant 1' apart in full to partial shade and average soil. About 2' tall and 14" wide. Z3.

***8461**: 1 for $3.50* ***8462**: 3 for $8.50*
***8463**: 6 for $15.50*

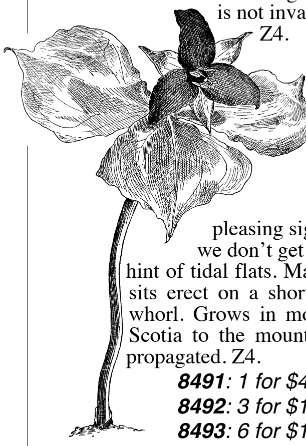
***Tradescantia* x *andersoniana* 'Zwanenburg Blue' Spiderwort** Grows in clumps with long grass-like leaves and stems topped with spidery clusters of buds that open to show pretty three-petaled triangular violet-blue flowers with delicate yellow stamens. Blooms for eight weeks from late spring through summer. The parent species are hardy North American natives adapted to moist woodland edges, meadows and prairies. A very nice selection for the woodland garden as it thrives under trees, also attractive by a pond or stream. Part to full shade. Will tolerate damp areas. 2' tall. Z3.

***8471**: 1 for $3.50*
***8472**: 3 for $8.50*
***8473**: 6 for $15.50*



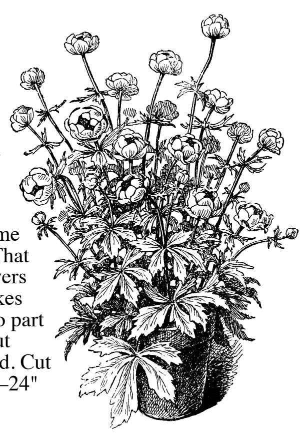
***Tricyrtis formosana* Toad Lily** Exotic orchid-like flowers are creamy white to pale pink, spotted with purplish-crimson flecks. Clusters of upward-facing 1" flowers bloom late summer. Glossy dark green leaves with purplish-green spots clasp the gracefully arched, irregularly segmented stem. Plants form clumps and are best placed in a moist woodland bed in partial to full shade and adequate moisture. Blooms in late summer when other plants are no longer at their peak. Spreads by stolons (runners) but is not invasive. Another name is *T. stolonifera*. 20–28" tall. Z4.

***8481**: 1 for $3.50*
***8482**: 3 for $8.50*
***8483**: 6 for $15.00*



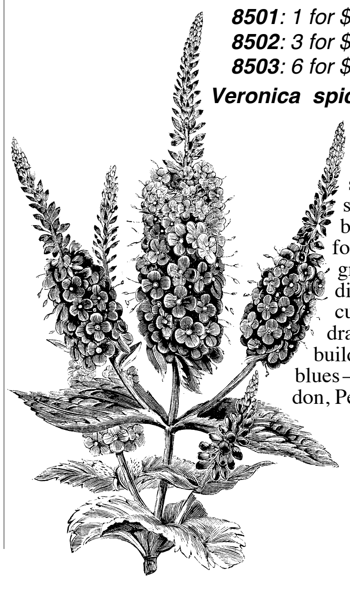
***Trillium erectum* Red Trillium, Stinking Benjamin** or **Wakerobin** Our local wildflower preserve features huge patches of red trillium blooming in late April, a spectacular and pleasing sight. All the descriptions mention a bad smell, but we don't get the "stinking" part, detecting only a faint oceany hint of tidal flats. Maroon blossom with three petals and three sepals sits erect on a short stem above the three oval leaves in a single whorl. Grows in moist rich woods, full or part shade, from Nova Scotia to the mountains of Georgia, west into Michigan. Nursery propagated. Z4.

***8491**: 1 for $4.00*
***8492**: 3 for $10.25*
***8493**: 6 for $18.50*



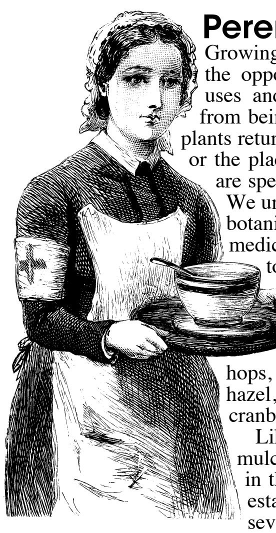
***Trollius* x *cultorum* 'Orange Princess'** One could call them big overgrown buttercups and I do—but I am also crazy about Trollius. Palmately lobed, then further divided and toothed (buttercup-like) leaves form a mound. Bowl-shaped orangey-yellow double flowers bloom in late spring, around the time of late tulips, on stems above the foliage. That time of the year, the fancy petal-filled flowers seem miraculous. Excellent for cutting. Likes moist to wet settings, heavy soil, full sun to part shade. Can be a bit difficult to establish, but very long-lived and rugged once it is settled. Cut back after blooming. Plant 8–12" apart. 12–24" tall. Z3.

***8501**: 1 for $4.50*
***8502**: 3 for $12.00*
***8503**: 6 for $20.00*



***Veronica spicata* 'Sunny Border Blue' Speedwell** is sometimes described as the best Veronica. 1993 PPA Perennial of the Year. Gentian-blue flowers from early summer to autumn. Multiple erect flower spikes, each thickly covered with tiny tubular blossoms, are 18–20" tall. Clump-forming plant has narrow glossy deep green finely serrated leaves. Excellent addition to the border or rockery. Good for cutting. Easy to grow in good well-drained soil, full to part sun. If we were building a garden we would combine the blues—Catmint, Hyssop, Lavender, Platycodon, Perovskia and this one. Z3.

***8511**: 1 for $4.00*
***8512**: 3 for $10.00*
***8513**: 6 for $17.00*



Perennial Medicinal Plants

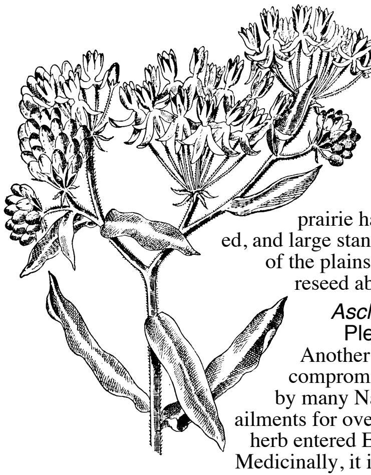
Growing medicinal plants in your garden gives you the opportunity to know their personalities, forms, uses and spirits. It also helps prevent wild plants from being overharvested. Medicine made from your plants returns you to your garden, regardless of the time or the place that you use it. Some of the plants listed are specifically for low-dose or homeopathic usage. We urge you to consult a local herbalist or botanical apothecary before using the medicine from any plant that is unfamiliar to you.

Many of the other plants we list have a tradition of medicinal use as well. These include lavender, bee balm, peony, rose, elder, hops, ginkgo, linden, hawthorn, witch hazel, blueberry, cranberry and highbush cranberry. (Index on page 67.)

Like most perennials, these appreciate a fall mulch and a sidedressing of compost or leaf mold in the spring. Some may take a year or more to establish before they flower; roots often take several years to reach harvestable maturity. The organic listings are certified by MOFGA Certification Services.

Cultivating Sanctuary Medicinal Collection We offer this collection as an opportunity to protect wild plants that are becoming endangered in their natural habitat. These species have been designated by United Plant Savers (UpS) on either the "At-Risk" or "To-Watch" lists. The mission of UpS is to protect native medicinal plants of the United States and Canada and their native habitat while ensuring an abundant renewable supply for generations to come. By growing these plants as ornamentals or medicinals, you cultivate sanctuary for species in danger. Please note that we carry additional plants from the UpS lists, marked at the end of the description.

Our collection consists of one each of the following three plants:



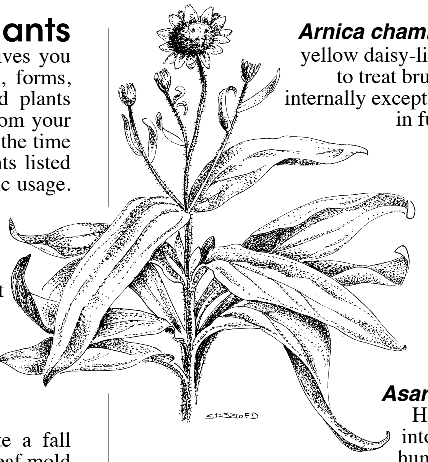
Echinacea purpurea - UpS "At-Risk" list. Thought of as a very common plant because of its popularity in gardening and hybridizing. However, in its natural prairie habitat it has been vastly overharvested, and large stands have been lost to farm cultivation of the plains regions. Very easy to grow and will reseed abundantly.

Asclepias tuberosa Butterfly Weed or Pleurisy Root - UpS "To-Watch" list. Another prairie plant whose habitat has been compromised by large-scale agriculture. Used by many Native American tribes for lung ailments for over a thousand years before the herb entered European pharmacopoeias. Medicinally, it is used in very small doses as a tincture for deep hard-to-cure lung infections. *Use with caution* and/or consult your local herbalist. This is a *low-dose* medicinal plant. More information about culture, see page 54.

Arnica chamissonis - UpS "To-Watch" list. All Arnica species should be watched so that they do not reach the endangered status. This is an extremely popular plant medicine. Overharvesting by wildcrafters is a problem and in some countries in Europe it is illegal to pick arnica flowers.

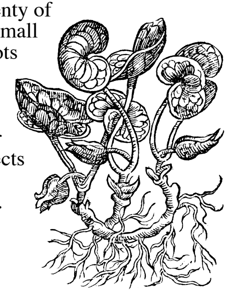
8521: *1 collection for $16.50*

Planting instructions for these perennial plants on page 53.



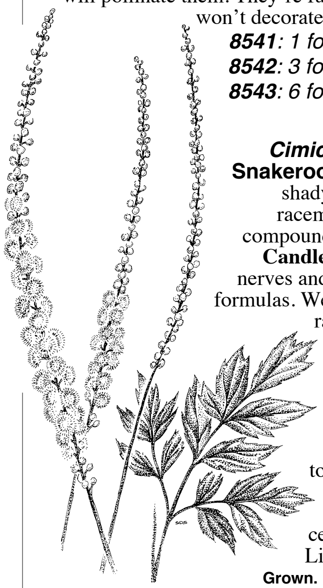
Arnica chamissonis Spreading groundcover with bright yellow daisy-like flowers used externally in oils and salves to treat bruises, sprains and inflammation. Never taken internally except in homeopathic doses. Thrives in moist soil in full sun but will take some shade. In the right conditions a few plants spaced a foot apart will develop into a dense long-lived patch. Blooms in July. Grows successfully in our climate and is a generally accepted substitute for *A. montana*. Full sun and well-drained soil. Lauren Cormier sustainably grew these North American natives. Z3. **ME Grown. UpS "To-Watch" list.**

8531: *1 for $5.75*
8532: *2 for $10.00*
8533: *3 for $13.50*



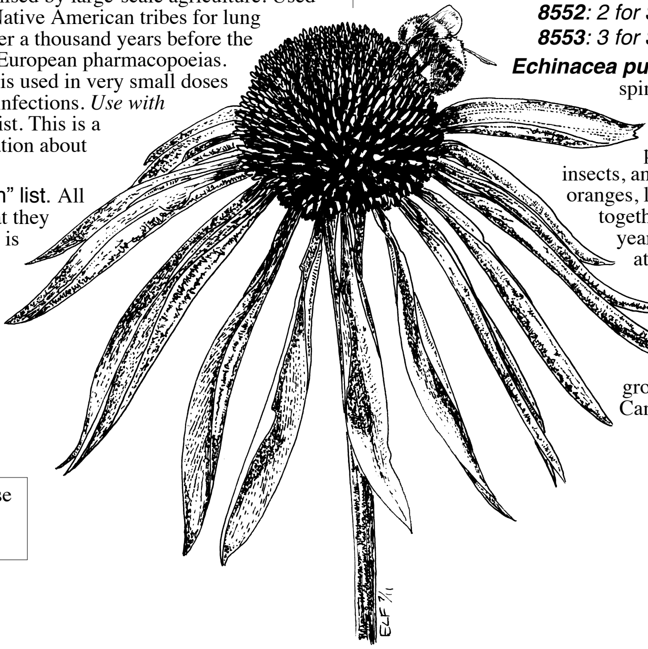
***Asarum canadense* Canadian Wild Ginger** Heart-shaped leaves up to 7" wide will spread into a beautiful groundcover 6–12" tall if given humus, shade and plenty of moisture. Leaves are large and slightly fuzzy, not small and glossy like the European species. Aromatic roots used like other gingers for their warming qualities and for soothing indigestion, coughs, colds and motion sickness. Grown for roots and foliage. The small reddish-brown urn-shaped flowers grow near the soil surface or in the leaf mold so crawling insects will pollinate them. They're fun to search for but won't decorate your landscape. Z3.

8541: *1 for $3.75*
8542: *3 for $9.75*
8543: *6 for $17.50*



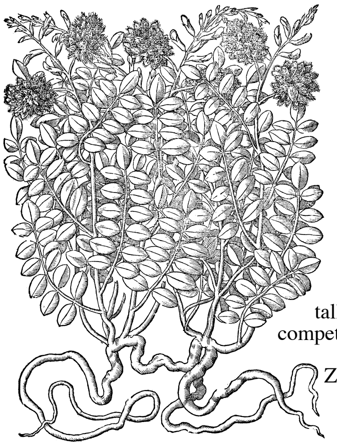
***Cimicifuga racemosa* Black Cohosh** or **Black Snakeroot** flourishes in the wilder part of the garden or shady border. In late July and August, long arching racemes of creamy flowers rise above the mound of compound foliage, hence another common name, **Fairy Candles**. Anti-spasmodic for cramps, pains, cramped nerves and emotions, included in many peri-menopausal formulas. We've heard quite a few women Susan's age say rather passionately, "I *love* this plant!" Diuretic and anti-inflammatory. Easy to grow, long-lived, needs division or harvest every 4–5 years. Racemes extend 6–10' over a 3–4' mound so it becomes very stately. Plant 30–36" apart in rich moist soil high in humus. Good in boggy spots. Prefers part shade, but tolerates full sun in deep moist soil. Often listed under its new botanical name: *Actaea racemosa*. We are happy to list certified-organic black cohosh grown by Joanna Linden at Shooting Star Farm in Canaan. Z3. **ME Grown. UpS "At-Risk" list.**

8551: *1 for $7.50*
8552: *2 for $13.75*
8553: *3 for $18.00*



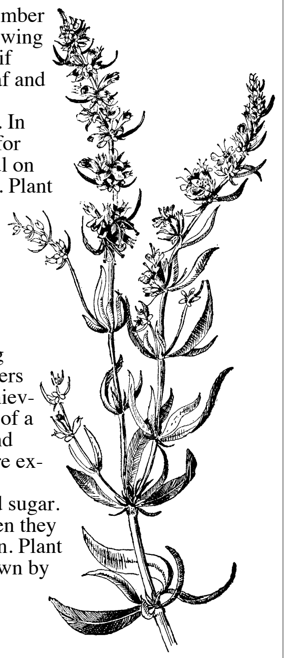
***Echinacea purpurea* Purple Coneflower** *Echinos* means spiny and the flower's big conical centers are very spiny and coppery yellow-brown, surrounded by a single row of reflexed lavender-purple petals. Flowers attract butterflies and beneficial insects, and last well when cut. Their colors marry pinks, oranges, lavenders and golds that wouldn't ordinarily go together in beds or bouquets. Tincture the roots of 3-year-old plants for a remedy that gives an immediate boost to the immune system; use it when you feel a cold or flu coming on. Vigorous grower likes full sun and sandy loam, self-sows and tolerates wind, heat and drought once established. 30–48" tall. Plant 20–30" apart in light soil. Certified organically grown by Joanna Linden at Shooting Star Farm in Canaan. Z3. **ME Grown. UpS "At-Risk" list.**

8561: *1 for $7.00*
8562: *2 for $12.50*
8563: *3 for $16.50*



***Glycyrrhiza uralensis* Chinese Licorice** The root is called *Gan cao* in China. Valued as a medicine, a sweetener and a flavor. Soothes stomaches, sore throats, mucous membranes; also balances energy and hormones. Good for menopausal women, but people with hypertension and diabetes should avoid. Roots can be harvested in the second or third year of growth and are astoundingly sweet. Good for making herbal concoctions palatable. Leguminous plant has compound oval leaves. Grows to 1–3' tall. Plant 8–12" apart and minimize weed competition to allow roots room to spread out. Sustainably grown by Lauren Cormier. Z5, possibly Z4 with protection.

***8571**: 1 for $7.00*
***8572**: 2 for $12.50*
***8573**: 3 for $16.50*

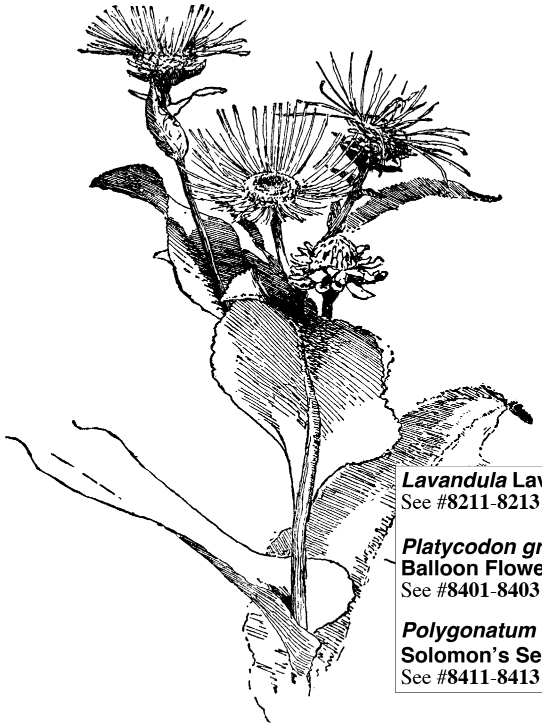


***Hyssopus officinalis* Hyssop** Blue-violet flowers on erect stalks blossom from June through September and are wonderfully ornamental. Well worth growing for an aromatic low hedge or in the border even if you don't have an herb garden. Bees love it! Leaf and flower infusions long used for sore throats and stomach troubles, flower spikes in cough syrups. In ancient Greece, *Hyssopos* was a holy herb used for cleaning sacred places. Thrives in dry soil, useful on slopes and any sunny difficult place. 12–20" tall. Plant 12–24" apart in poor soil, full sun to light shade. Organically grown by Gail Edwards at Blessed Maine Herb Farm in Athens. Z3. **ME Grown.**

***8581**: 1 for $7.00*
***8582**: 2 for $12.50*
***8583**: 3 for $16.50*

***Inula helenium* Elecampane** Spectacular big plant sports pretty bright yellow daisy-type flowers with very narrow petals, long coarse leaves. Achieving heights of up to 8', good as an accent or part of a wild border in sun or part shade. Helps attract and support beneficial insects. Mucilaginous roots are expectorant; support and decongest lungs, are anti-bacterial and anti-fungal, and help balance blood sugar. Harvest 2-year-old or older roots in mid-fall when they contain up to one quarter of their weight in inulin. Plant 2–3' apart, ordinary garden soil. Sustainably grown by Lauren Cormier. Z4, possibly Z3. **ME Grown.**

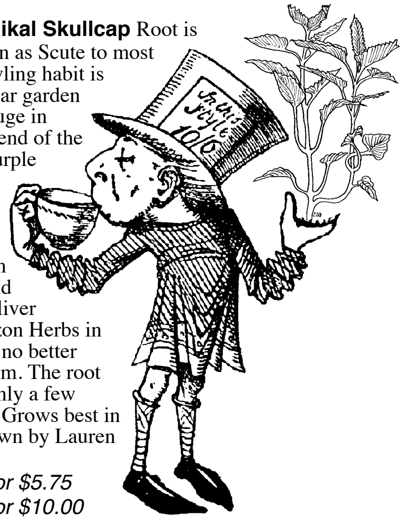
***8591**: 1 for $5.75*
***8592**: 2 for $10.00*
***8593**: 3 for $13.50*



***Lavandula* Lavender**
See #**8211**-**8213**.

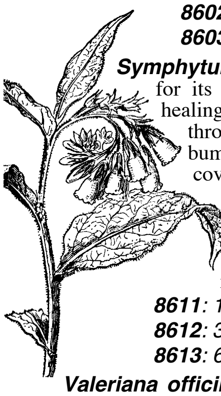
***Platycodon grandiflorus* Balloon Flower**
See #**8401**-**8403**.

***Polygonatum multiflorum* Solomon's Seal**
See #**8411**-**8413**.



***Scutellaria baicalensis* Baikal Skullcap** Root is *Huang qin* in China, but known as Scute to most herbalists here. Shrublike crawling habit is different from that of the regular garden skullcap and the flowers are huge in comparison. They form at the end of the stems in neat rows of bright purple with a lighter purple to white accent on the lower lip. A native to southern China and Korea. In traditional Chinese medicine, the root is used as an anti-inflammatory, diuretic, and antitumor agent, especially in liver diseases. Richo Cech of Horizon Herbs in Oregon maintains that there is no better anti-infection agent in herbalism. The root attains harvestable size after only a few years. Space plants 1–2' apart. Grows best in partial shade. Sustainably grown by Lauren Cormier. Z4. **ME Grown.**

***8601**: 1 for $5.75*
***8602**: 2 for $10.00*
***8603**: 3 for $13.50*



***Symphytum officinale* Comfrey or Knitbone** Well-known for its soothing properties. Contains allantoin, promotes healing of skin and bone; also demulcent for lung and throat. Hanging bell-like pink flowers much loved by bumblebees open in early summer. Stem and leaves covered with bristly hairs. Easy-to-grow vigorous plant demands space and *can be very invasive*; be careful where you plant it and control with regular harvest. 24–48" tall. Plant 16–24" apart in average well-drained soil, sun or shade. Sustainably grown in China, ME. Z3. **ME Grown.**

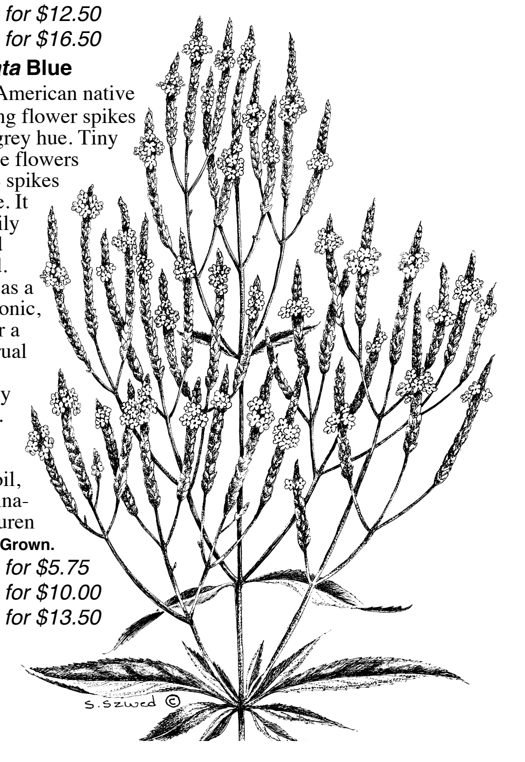
***8611**: 1 for $4.50*
***8612**: 3 for $11.25*
***8613**: 6 for $20.00*

***Valeriana officinalis* Valerian** You either love the unmistakable smell of Valerian root or you find it repellant. However, most people would agree that this is a beautiful roadside wildflower. A strong and upright plant with small white or rosy flowers in flat clusters above pinnate leaves. We see it blooming by the roadsides in early summer, especially around the midcoast. I'm told that European valerians were brought to Camden gardens and escaped and have been spreading ever since. Well known anti-spasmodic, nervine and sedative is often used for sleeplessness, anxiety and other nervous complaints. Has become a commonly used herb, its fame comparable to that of St. Johnswort. Divide or harvest thick rootstock every 4–5 years. 2–4' tall. Plant 12–15" apart in moist, well-drained soil in full sun. Organically grown by Gail Edwards. Z3. **ME Grown.**

***8621**: 1 for $7.00*
***8622**: 2 for $12.50*
***8623**: 3 for $16.50*

***Verbena hastata* Blue Vervain** North American native with tall branching flower spikes of a deep green-grey hue. Tiny bright purple-blue flowers whorl around the spikes one ring at a time. It will re-seed readily in the garden and around your yard. Commonly used as a nervous system tonic, mild sedative, for a variety of menstrual problems, neck tension, and many other complaints. 5–7' tall. Plant in full sun and regular garden soil, 1–2' apart. Sustainably grown by Lauren Cormier. Z3. **ME Grown.**

***8631**: 1 for $5.75*
***8632**: 2 for $10.00*
***8633**: 3 for $13.50*



Page	Name	Grown in Maine	Zone	Edible Landscape	For Wet Spots	For Shady Spots	For Dry Spots	Wild Life	Specimen	Hedges	Ground Covers
38	Arborvitae	❁	2		◆	◆		◆		◆	
32	Asparagus		3	◆							
40	Bayberry	❁	2	◆			◆	◆		◆	
40	Beach Plum		3	◆			◆	◆		◆	
34	Bearberry	❁	2	◆		◆	◆	◆			◆
39	Beautybush	❁	4						◆		
59	Bee Balm		3		◆						
45	Birch, River		4		◆			◆	◆		
45	Birch, Yellow		3		◆	◆		◆	◆		
31	Bittersweet	❁	3					◆			
62	Black Cohosh	❁	3	◆	◆	◆					
41	Black Pussy Willow	❁	4		◆			◆			
28	Blackberry	❁	4?	◆						◆	
26	Blueberry, Highbush		4	◆	◆			◆		◆	
26	Blueberry, Lowbush		2	◆	◆		◆	◆			◆
36	Buckeye	❁	4			◆				◆	◆
36	Butterfly Bush	❁	4					◆			
54	Butterfly Weed		4/5					◆	◆		
36	Buttonbush	❁	4		◆	◆		◆	◆		
46	Catalpa		4						◆		
49	Cherry, Cornelian		4	◆		◆		◆			
40	Cherry, Dwarf Sour		3	◆				◆			
40	Cherry, Nanking	❁	2	◆				◆		◆	
45	Chestnut, American		4	◆				◆	◆		
36	Chokeberry	❁	4	◆	◆	◆	◆	◆		◆	◆
50	Crabapples	❁	2	◆				◆	◆		
34	Cranberry, American	❁	3	◆	◆			◆			◆
42	Cranberry, Highbush		2	◆	◆	◆		◆		◆	
56	Cranesbill		4				◆				◆
46	Dawn Redwood		4		◆			◆	◆		
57	Daylilies	❁	2						◆		◆
49	Dogwood, Pagoda	❁	3			◆		◆			
37	Dogwood, Round-leaved	❁	3					◆		◆	
31	Dutchman's Pipe		4			◆					
62	Echinacea	❁	3	◆			◆				
41	Elderberry		3	◆	◆			◆		◆	
56	Ferns		2,3		◆	◆					◆
45	Fir, Balsam	❁	3			◆	◆	◆		◆	
37	Forsythia	❁	3							◆	
46	Ginkgo		3	◆					◆		
29	Grape		3	◆				◆			
37	Hazelnut		4	◆				◆	◆	◆	
34	Heather		4	◆			◆				◆
57	Hibiscus, Rose Mallow		4						◆		
40	Honeyberry		2	◆				◆			
31	Hops		3	◆							
32	Horseradish		3	◆							
58	Hostas		3			◆			◆		◆
38	Hydrangea macrophylla		4			◆			◆	◆	
63	Hyssop	❁	3	◆			◆			◆	
58	Iris, Siberian	❁	3		◆				◆		
49	Juneberry	❁	3	◆	◆						
30	Kiwi		4	◆				◆			
58	Lavender		3	◆			◆				
44	Lilac	❁	2-5				◆			◆	
50	Lilac, Japanese Tree	❁	3				◆		◆		
55	Lily of the Valley		2			◆	◆				◆
48	Linden, American	❁	3	◆				◆	◆		
48	Linden, Littleleaf	❁	3	◆				◆	◆		
34	Lingonberry	❁	3	◆				◆			◆
45	Maple, Red	❁	3		◆			◆	◆		
45	Maple, Sugar	❁	3	◆				◆	◆		
40	Mockorange		3						◆		
46	Mulberry		4/5	◆				◆	◆		
47	Oak, Bur		3	◆	◆			◆	◆		
47	Oak, Red	❁	4				◆	◆	◆		
47	Oak, Swamp White	❁	3	◆	◆			◆	◆		
36	Peashrub, Siberian	❁	3	◆			◆	◆		◆	

Page	Name	Grown in Maine	Zone	Edible Landscape	For Wet Spots	For Shady Spots	For Dry Spots	Wild Life	Specimen	Hedges	Ground Covers
24	Plum, American		3	◆				◆		◆	
40	Potentilla	❀	2		◆		◆			◆	
61	Pulmonaria		3			◆					◆
27	Raspberry		4	◆				◆		◆	◆
28	Raspberry, Flowering	❀	3					◆		◆	
49	Redbud	❀	4			◆		◆	◆		
32	Rhubarb		3	◆							
42	Rose, Cuthbert Grant		3				◆	◆		◆	
43	Rose, Fru Dagmar Hastrup		4	◆				◆		◆	
42	Rose, Rugosa	❀	2	◆			◆	◆		◆	◆
43	Rose, Scabrosa		3	◆				◆		◆	
60	Russian Sage		4/5				◆				
49	Serviceberry, Shadbush	❀	3	◆	◆						
37	Smokebush	❀	4				◆		◆		
42	Snowberry, Red	❀	4					◆			◆
42	Snowberry, White	❀	3			◆		◆			
61	Solomon's Seal	❀	3		◆	◆					
39	Spicebush		4	◆	◆	◆		◆			
61	Spiderwort		3		◆	◆					
41	Spirea	❀	3						◆	◆	
47	Spruce, Colorado Blue	❀	2					◆	◆	◆	
47	Spruce, Norway	❀	2					◆	◆	◆	
28	Strawberry		3	◆							◆
41	Sumac, Staghorn	❀	3	◆				◆		◆	
37	Summersweet	❀	3		◆	◆		◆	◆	◆	
39	Sweetspire	❀	4		◆		◆			◆	
42	Viburnum, Nannyberry	❀	2	◆	◆			◆		◆	
42	Viburnum, Snowball	❀	4		◆			◆	◆	◆	
46	Walnut, Black		4	◆				◆	◆		
42	Weigela		4						◆	◆	
49	Western Sandcherry	❀	3	◆						◆	
62	Wild Ginger		3	◆	◆	◆					◆
41	Willow, Arctic	❀	3		◆			◆	◆	◆	
48	Willow, Cape Rosier	❀	4		◆						
50	Willow, Coral Bark	❀	2		◆				◆		
41	Willow, Dappled	❀	4		◆				◆	◆	
48	Willow, Snake	❀	5		◆				◆		
48	Willow, Weeping	❀	4		◆				◆		
38	Winterberry	❀	4		◆			◆		◆	
50	Witch Hazel	❀	3		◆	◆		◆			

APPLE MANAGEMENT RECORD — 2011 SEASON

While our goal on the farm may be to produce clean organic fruit with no sprays, we do still spray. Below we have reproduced our management schedule including spray and non-spray regimes. The timing is not perfect, succumbing to the weather, machine malfunctions, unexpected visitors, and so on. See explanations and plans for future improvements in the Comments column. Although our orchard is not certified, we adhere to organic practices.

Most of the spray materials listed are available in the Organic Growers Supply section of the Fedco Seeds catalog. Others are available online. More detailed descriptions of materials are found at OGS, both catalog and online, in Michael Phillips' book *The Apple Grower*, and on various websites. Our recipes for sprays are below. Because tree sizes vary, volumes are only a guess. However, about 1.5 gallons of spray will cover a mature standard-size tree. If you have a favorite regime or spray and don't see it here, please let us know—we're into experimentation. Note: We never spray for scab.

Date	Purpose(s)	Mix includes	Comments
May 13	Spring holistic 1	Liquid Fish, Neem	
May 28	Fruit set pests	Surround	Primarily for plum curculio. Spray apples and plums
May 31	Fruit set pests	Surround	Second coat of Surround (heavy rain on May 30)
June 4	Fruit set pests	Surround, Entrust	Entrust primarily for European Apple Sawfly

June 7 Removed tree guards, started borer patrol and weeding trees, painted w/ interior latex paint and joint compound

June 10	Spring Holistic 2 Fruit set pests	Liquid Fish, Neem Surround	Fourth coat of Surround

June 13 Started scything around trees/orchard

June 19	Summer Holistic 1 Fruit set pests	Liquid Fish, Neem Surround, DiPel	Fifth coat of Surround DiPel primarily for Codling Moth

June 22-23 Weeded, pruned, and added soil amendments to apple saplings in nursery. Started thinning the apple crop.

July 6	Fruit set pests	Surround, DiPel	Last coat of Surround. DiPel primarily for CM

July 12 Put cardboard rings (codling moth traps) on trunks.

July 18	Fruit set pests	Entrust	Entrust primarily for Apple Maggot Fly (partial, incomplete spray)

July 20 Hung apple maggot lure and red sphere traps. Started removing all apple drops.

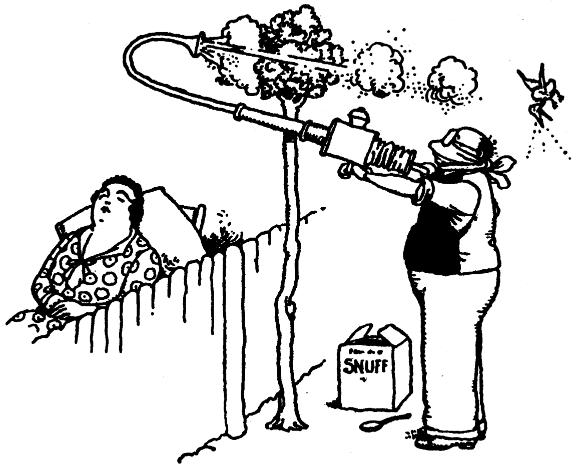
July 22	Trunk spray	Neem, Surround	Trial on 40 young trees for apple borers
Aug. 9	Summer Holistic 2 Fruit pests	Neem, EM, Seaweed Entrust	Completed Entrust (see 7/18), primarily for AMF. Should begin to spray EMs earlier (bi-weekly throughout the season?)

Aug. 10-12 Leaf and soil testing with U Maine's Highmoor Farm. Inspected trees for dieback and tent caterpillars.

Aug. 19	Trunk spray	Neem, Surround	2nd coat on trunks for apple borers. Same as July 22nd.
Aug. 22	Summer Holistic 3 Fruit pests	Neem, EM, Seaweed DiPel	DiPel primarily for 2nd generation CM. Spray earlier next year (broken sprayer set us back!)
Aug. 29	Summer Holistic 4	Neem, EM, Seaweed	
Oct. 21	Biological Stew	See recipe below.	

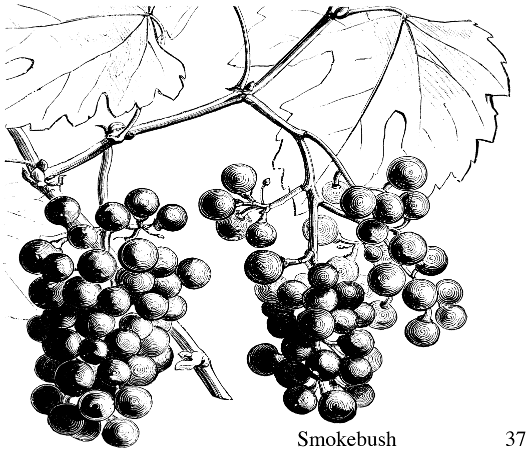
Ingredients and Recipes (per 5 gal water): Except for neem, all ingredients should be added once the bucket is mostly full with water.

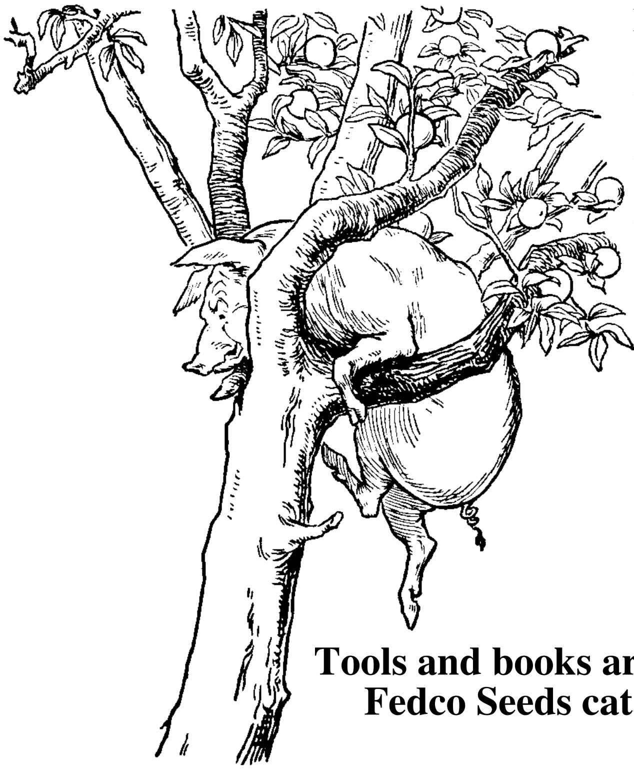
- DiPel Dry Flowable wettable powder (*Bacillus thuringiensis*): Insecticide effective against lepidopterous caterpillars, but only lasts 3 days after application, and deteriorates with UV exposure. We mix in warm molasses to encourage prompt feeding, and fish oil to screen out UV and to help the *Bt* adhere. Directions: Use 3 T powder per 5 gal water; add 2 T fish oil and 2 T molasses.
- Effective Microbes: a lacto-fermented elixir, a tonic for your trees! Read Michael Phillips' explain of effective microbes in his forthcoming book *The Holistic Orchard*. Directions: 1 cup brewed ("activated") per 5 gal water. We bought ProBio Balance™ Original from scdprobiotics.com, which comes as the "mother culture," and we use that in small doses to brew a "tea" that we mix into our spray.
- Entrust: Spinosad insecticide effective against many apple pests. Directions: 4 tsp. powder per 15 gal water. Yes, teaspoons; it doesn't take much! Home orchardists substitute Monterey Garden Spray.
- Liquid Fish: Cold-process fish liquid from Neptune's Harvest. Use 1.25 cups per gallon of water.
- Neem Oil: Insecticide, nutrient source and immune booster. Directions: put 3 oz neem oil in a 5-gal bucket, add about ½ tsp natural dish detergent (not soap), agitate well until neem turns light in color. Add 3 cups of very warm water and continue to agitate until emulsified. Fill bucket w/ cold or room-temp water, stir. Spray right away and slosh tank around periodically. Clean out sprayer with CitraSolv.
- Surround WP: Primarily kaolin clay, deters plum curculio and european apple sawfly.
- Wettable Seaweed Powder: Foliar feed with growth hormones and many trace nutrients that are great for apples.
- Fish oil: Crocker's Fish Oil, sticker-spreader, rich in nutrients, UV inhibitors.
- Biological Stew: A Michael Phillips recipe. In 5-gal bucket of prepared Neem, add 6.25 cups Liquid Fish concentrate, 1 oz unbrewed Effective Microbes, 1 oz molasses.



Index

Page
Abies 45
Acer 45, 49
Achillea 53
Acidanthera 52
Aconitum 53
Actinidia 30
Aesculus 36
Agri-gel 27, 47
Alcea rosea 53
Amelanchier 49
Anemone 52
Apios 32
Apple 8-15,18-19, 50-51
Apricot 22
Aquilegia vulgaris 54
Arborvitae 48
Arctostaphylos 34
Aristolochia 31
Armoracia rusticana 32
Arnica 62
Aronia 36
Asarum 62
Asclepias 54
Asian Pear 21
Asparagus 32
Aster 54
Astilbe 54
Avens 56
Balloon Flower 60
Baptisia 54
Basswood 48
Bayberry 40
Beach Plum 40
Bearberry 34
Beautybush 39
Bee Balm 59
Bergenia cordifolia 54
Berries 26-28
Betula 45
Birch 45
Bittersweet 31
Blackberry 28
Black Cohosh 62
Black Locust 48
Black Walnut 46
Black-eyed Susan 61
Blazing Star 58
Bleeding Heart 55
Bluebell 59
Blueberry 26
Book 9
Buckeye 36
Buddleia 36
Bulbs 52-53
Butterfly Bush 36
Butterfly Weed 54
Buttonbush 36
Calluna 34
Cane Fruits 27-28
Caragana 36
Cardinal Flower 59
Castanea 45
Catalpa 46
Catmint 59
Celastrus 31
Cephalanthus 36
Cercis 49
Chelone 54
Cherry, Cornelian 49
Cherry, Dwarf Sour 40
Cherry, Nanking 40
Cherry, Pie 22-23
Cherry, Sweet 22
Chestnut 45
Chinese Licorice 63
Chokeberry 36
Cider Apple 18-19
Cimicifuga racemosa 62
Cinquefoil 40
Clethra alnifolia 37
Collections
  Cider Apple 19
  Hybrid Plum 24
  Edible Landscape 33
  Medicinal 62
Columbine 54
Comfrey 63
Coneflower 61, 62
Conifers 45, 47
Convallaria 55
Coralberry 42
Cornelian Cherry 49
Cornus alternifolia 49
Cornus mas 49
Cornus spp. 37
Corylus 37
Cotinus 37
Crabapple 50-51
Cranberry, American 34
Cranberry, Highbush 42
Cranesbill 56
Crataegus 49
Crocosmia 52
Dahlia 52
Dappled Willow 41
Dawn Redwood 46
Daylily 57
Delphinium 55
Dianthus 55
Dicentra 55
Digitalis 55
Dogwood 37, 49
Dutchman's Pipe 31
Echinacea 62
Elderberry 41
Elecampane 63
Eryngium alpinum 55
Evergreens 45, 47
False Indigo 54
Ferns 56
Fir, Balsam 45
Forsythia 37
Foxglove 55
Fragaria 28
Geranium 56
Geum chiloense 56
Ginger, Wild 62
Ginkgo 46
Gladiolus 52-53
Gleditsia 46
Glycyrrhiza 63
Grape 29-30
Ground Covers 34
Groundnut 32
Hamamelis 50
Hawthorn 49
Hazelnut 37
Heather 34
Helleborus 57
Hemerocallis 57
Hen and Chicks 61
Hibiscus 37, 57
Hollyhock 53
Honeyberry 40
Honeylocust 46
Hops 31
Horseradish 32
Hosta 58
Humulus 31
Hydrangea 38
Hyssop 63
Ilex 38
Inula helenium 63
Iris 58
Itea 39
Juglans 46
Juneberry 49
Kiwi 30
Kolkwitzia 39
Lavender 58
Lenten Rose 57
Liatris 58
Licorice 63
Lilac 44, 50
Lily 59
Lily of the Valley 55
Linden 48
Lindera benzoin 39
Lingonberry 34
Lobelia cardinalis 59
Lonicera caerulea 40
Lungwort 61
Maidenhair Tree 46
Malus 8-15, 18-19, 50-51
Maple 45, 49
Medicinal Plants 62-63
Mertensia virginica 59
Metasequoia 46
Mockorange 40
Monarda 59
Monkshood 53
Morus 46
Mulberry 46
Myrica 40
Nepeta faasenii 59
Nanking Cherry 40
Nannyberry 42
Oak 47
Painted Daisy 61
Peach 23
Pear 19, 20-21
Peashrub 36
Peony 60
Perennial Plants 53-63
Perovskia 60
Philadelphus 40
Phlox 60
Picea 47
Pine 47
Platycodon 60
Plum 24-25
Plum, Beach 40
Polygonatum 61
Potentilla 40
Pruning 5, 30, 38-9, 44
Prunus spp. 19, 22-25, 40
Pulmonaria 61
Pussy Willow, Black 41
Pyrethrum 61
Pyrus 19, 20-21
Quercus 47
Ranunculus 53
Raspberry 27
Raspberry, Black 27
Raspberry, Flowering 28
Redbud 49
Rhubarb 32
Rhus typhina 41
Robinia 48
Rootstock 19
Rose 42-43
Rose of Sharon 37
Rose Mallow 57
Rubus 27-28
Rudbeckia 61
Sage, Russian 60
Salix spp. 41, 48, 50
Sambucus 41
Sandcherry 40
Scionwood 19
Scutellaria 63
Sea Holly 55
Sedum 61
Sempervivum 61
Serviceberry 49
Shadbush 49
Shrubs 36-44
Siberian Iris 58
Skullcap 63
Smokebush 37
Snowberry 42
Solomon's Seal 61
Speedwell 61
Spicebush 39
Spiderwort 61
Spirea 41
Spruce 47
Stone Fruits 22-25
Strawberry 28
Sumac, Staghorn 41
Summersweet 37
Sweetspire 39
Sweet William 55
Symphoricarpos spp. 42
Symphytum officinale 63
Syringa reticulata 50
Syringa spp. 44
Tanacetum 61
Thimbleberry 28
Thuja 48
Tilia 48
Toad Lily 61
Tradescantia 61
Tree Lilac 50
Trees, Large 45-48
Trees, Small 49-51
Tricyrtis formosana 61
Trillium 61
Trollius x cultorum 61
Turkscap Lily 59
Turtlehead 54
T-shirt 11
Vaccinium spp. 26, 34
Valerian 63
Verbena 63
Veronica 61
Vervain 63
Viburnum spp. 42
Vines 29-31
Vitis 29-30
Walnut, Black 46
Weigela 42
Willow 41, 48, 50
Windflower 52
Winterberry 38
Witch Hazel 50
Yarrow 53
Order Forms **center**





Tools and books are in the Fedco Seeds catalog.

New for 2012

- Dwarf & Semi-Dwarf Apple Trees
- Edible Landscape Collections
- Kolomikta Kiwis
- Dwarf Sour Cherries
- Black Raspberries
- Honeyberries
- American Chestnut
- Mulberries
- Miss Portland Siberian Iris
- Chinese Licorice

- Discount Deadline moved from December to January 20
- Larger discount for large orders

Fedco Trees
PO Box 520
Waterville, ME 04903-0520

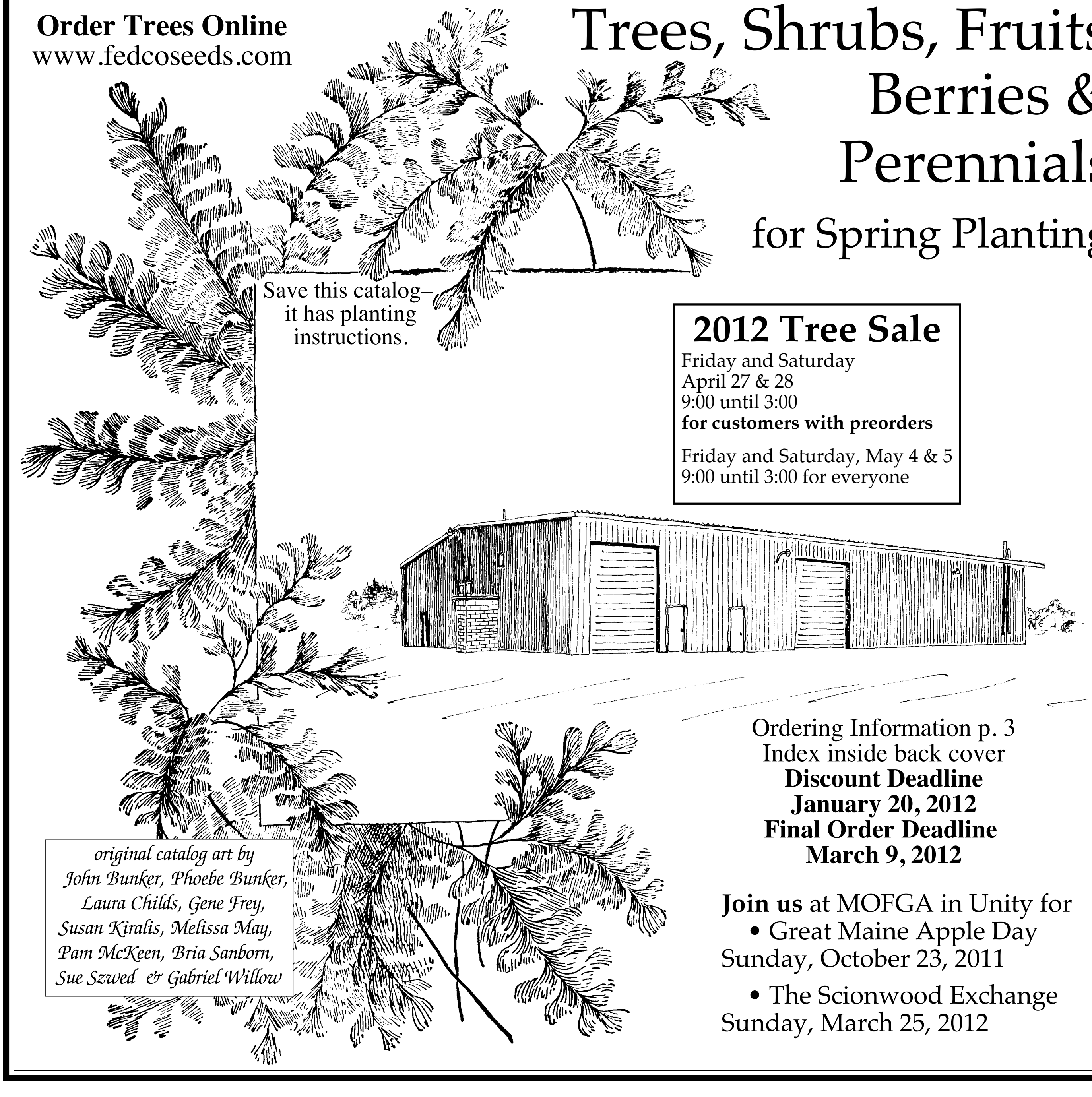
address service requested

Presorted Standard
U.S. Postage
PAID
Fedco Seeds Inc.

Order Trees Online
www.fedcoseeds.com

Trees, Shrubs, Fruits, Berries & Perennials

for Spring Planting



Save this catalog–
it has planting
instructions.

2012 Tree Sale

Friday and Saturday
April 27 & 28
9:00 until 3:00
for customers with preorders

Friday and Saturday, May 4 & 5
9:00 until 3:00 for everyone

Ordering Information p. 3
Index inside back cover
Discount Deadline
January 20, 2012
Final Order Deadline
March 9, 2012

Join us at MOFGA in Unity for
- Great Maine Apple Day
Sunday, October 23, 2011
- The Scionwood Exchange
Sunday, March 25, 2012

original catalog art by
John Bunker, Phoebe Bunker,
Laura Childs, Gene Frey,
Susan Kiralis, Melissa May,
Pam McKeen, Bria Sanborn,
Sue Szwed & Gabriel Willow